

METRO TASMANIA PTY LTD

**SUBMISSION TO THE
GOVERNMENT PRICES
OVERSIGHT COMMISSION**

18 FEBRUARY 2000

CONTENTS

1.	INTRODUCTION	5
1.1	BACKGROUND.....	5
1.2	THIS SUBMISSION	5
2.	REGULATORY AND OPERATING ENVIRONMENT	6
2.1	REGULATORY ENVIRONMENT.....	6
2.2	OVERALL POLICY FRAMEWORK FOR METRO'S FUTURE CONTRACTS	8
3.	METRO OVERVIEW	9
3.1	SERVICES AND OPERATIONS	9
3.2	ASSETS.....	9
3.3	PATRONAGE	10
3.4	MARKET ROLE AND PROFILE	11
3.5	FINANCIAL PERFORMANCE (CURRENT/PAST TRENDS)	12
3.6	MANAGEMENT INFORMATION SYSTEMS & SERVICE PLANNING	12
3.7	RECENT SERVICE INITIATIVES.....	12
3.8	ACCESSIBILITY POLICIES.....	13
3.9	OPERATIONAL AND COST EFFICIENCY.....	13
4.	METRO PROSPECTS AND PROPOSED INITIATIVES	15
4.1	FUTURE DEMAND PROSPECTS	15
4.2	PATRONAGE AND REVENUE ENHANCEMENT INITIATIVES.....	16
4.3	EXPECTED EFFICIENCY INITIATIVES	19
4.4	IMPLICATIONS OF NEW TAX SYSTEM	20
4.5	ASSET REPLACEMENT AND NEW INVESTMENT.....	21
4.6	METRO PERFORMANCE OBJECTIVES.....	23
4.7	COMMUNITY SERVICE OBLIGATIONS.....	24
4.8	FORECAST FINANCIAL PERFORMANCE.....	24
5.	REVIEW OF METRO FARES	25
5.1	CURRENT METRO FARE SYSTEM.....	25
5.2	PAST FARE TRENDS AND DEVELOPMENTS	26
5.3	GPOC 1997 FARES INVESTIGATION AND SUBSEQUENT DEVELOPMENTS	26
5.4	METRO TICKETING SYSTEM	28
5.5	PRIVATE OPERATOR FARE COMPARISONS	28
5.6	INTERSTATE FARE AND COST RECOVERY COMPARISONS	29
5.7	EVIDENCE ON FARES ELASTICITIES.....	29
5.8	PROPOSED FARE POLICY PRINCIPLES AND DIRECTIONS.....	30
5.9	FARE STRUCTURES.....	30
5.10	FARE LEVELS	31
5.11	FARES AND TICKET TYPES	31
5.12	FARE CONCESSIONS	32
5.13	FARE ADJUSTMENT ISSUES.....	32
6.	CONCLUSIONS AND RECOMMENDATIONS	33
6.1	COST EFFICIENCIES.....	33
6.2	FARES ASPECTS	33

6.3 PATRONAGE PROSPECTS	34
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APPENDICES

A. DATA BASE OF METRO STATISTICS.....	35
B. SERVICE AND OPERATIONS	36
B1 SCOPE OF OPERATIONS	36
B2 SERVICE LEVELS	36
B3 SERVICE QUALITY STANDARDS	36
C. FARE ASPECTS	38
C1 INTERSTATE FARE COMPARISONS	38
C2 INTERSTATE COST RECOVERY COMPARISONS	40
C3 EVIDENCE OF FARE ELASTICITIES	42
D. PROPOSAL FOR CHANGES IN DAY ROVER/DAY TRIPPER	44
D1 OVERVIEW	44
D2 PASSENGER BENEFITS	44
D3 OPERATIONAL BENEFITS	45
D4 REVENUE IMPACTS	45
D5 FARE CHANGE TO MAINTAIN REVENUE	45
E. PATRONAGE ANALYSES AND PROJECTIONS	47
E1 CURRENT METRO PATRONAGE ANALYSE	47
Fig E1 TOTAL PATRONAGE TRENDS (TOTALS)	48
Fig E2 TOTAL PATRONAGE TRENDS (RELATIVE TO 1985/86)	49
Fig E3 TOTAL PATRONAGE TRENDS BY PASSENGER TOTALS	50
Fig E4 TOTAL PATRONAGE TRENDS BY PASSENGER (RELATIVE TO 1985/86)	51
Fig E5 TOTAL BOARDINGS BY PASSENGER (PROPORTIONS).....	52
Fig E6 PASSENGERS PER BUS KILOMETRE TRENDS	53
TABLE E1 METRO PATRONAGE BY TICKET TYPE 1998/99	54
HOBART	54
LAUNCESTON	55
BURNIE	56
E2 1998/99 PATRONAGE BY PASSENGER TYPE AND TIME PERIOD	57
Fig E7A BOARDINGS BY TICKET TYPE HOBART	58
Fig E7B BOARDINGS BY TICKET TYPE LAUNCESTON	58
Fig E7C BOARDINGS BY TICKET TYPE BURNIE	58
TIME PERIOD.....	59
Fig E8A BOARDINGS BY TIME PERIOD HOBART	60
Fig E8B BOARDINGS BY TIME PERIOD LAUNCESTON	60
Fig E8C BOARDINGS BY TIME PERIOD BURNIE	60
E3 METRO PATRONAGE LEVELS RELATIVE TO INTERSTATE CITIES	61
Fig E9 PATRONAGE/CAPITAL VS POPULATION - ACTUAL	62
Fig E10 PATRONAGE/CAPITAL VS POPULATION ADJUSTED (1)	63
Fig E11 PATRONAGE/CAPITAL VS POPULATION ADJUSTED (2)	64
E4 METRO PATRONAGE PROJECTIONS	65
E4.4 "BASE "PATRONAGE PROJECTION RESULTS	66

	TABLE E2 DEMOGRAPHIC/ECONOMIC AND PATRONAGE PROJECTIONS 1999/2014	67
F.	MARKET APPRAISAL AND PROSPECTS	68
F1	OVERVIEW	68
F2	MARKET SHARE	68
F3	ATTITUDES, PERCEPTIONS AND PREFERENCES	69
F3.1	REASONS FOR USE/NON USE OF BUS SERVICES	69
F3.2	SUGGESTED BUS SERVICE IMPROVEMENTS	69
F3.3	PERCEPTIONS OF METRO FEATURES: IMPORTANCE AND PERFORMANCE	69
	TABLE F1 MARKET SHARE ANALYSIS FOR METRO BUS TRAVEL	70
G.	SERVICE PLANNING AND MANAGEMENT SYSTEMS	71
G1	SERVICE PLANNING AND REVIEW PROCESS	71
G2	MANAGEMENT SYSTEMS	71
H.	PAST SERVICE INITIATIVES	72
H1	SERVICE QUALITY ASPECTS	72
H2	SERVICE IMPROVEMENTS	72
H3	COMMENTARY ON KEY SERVICE INITIATIVES	73
H3.1	DOORSTOPPER SERVICES	73
H3.2	SHOPPER SERVICES	74
H3.3	COURTESY ZONE	74
H3.4	BURNIE AREA SERVICE ENHANCEMENTS	74
H3.5	SUMMER HOLIDAY SERVICE	75
J.	OPERATIONAL AND COST EFFICIENCY	76
J1	OVERVIEW	76
J2	METRO COMPARATIVE PERFORMANCE	76
J3	UNIT COST TRENDS OVER TIME.....	77
J4	SUMMARY	78
	TABLE J1 METRO PERFORMANCE COMPARISON 1998/99	79
	TABLE J2 METRO UNIT COST TRENDS 1992/93 - 1998/99	79
K.	REFERENCES	80

1. INTRODUCTION

1.1 BACKGROUND

As part of its commitment to the National Competition Policy Agreements, Tasmania established the Government Prices Oversight Commission (GPOC) in January 1996. This body is intended to incorporate all the elements required of a prices oversight body described in the Agreement signed by all Australian Governments.

The Commission is required to investigate and report on the pricing policies of Government Business Enterprises (GBEs) and State Owned Companies (SOCs) that are monopoly, or near-monopoly, suppliers of goods and services. In October 1999, the Treasurer directed the Commission to conduct its second investigation into the pricing policies of Metro Tasmania Pty Ltd, formerly the Metropolitan Transport Trust (hereafter referred to as Metro). Metro is the supplier of scheduled bus services in the cities of Hobart, Launceston and Burnie.

In this investigation, the Commission is required to investigate the pricing policies associated with the current provision of scheduled services by Metro and to make recommendations to Government on maximum prices that Metro should charge for the following three-year period.

In undertaking this investigation, the Commission is required to take into account the matters referred to explicitly in Section 31 of the Government Prices Oversight Act and also the following two additional issues:

- The effects of the Goods and Services Tax and other elements of the New Tax System on the pricing policies of Metro; and
- National Competition Policy requirements as they apply to regular passenger transport services.

1.2 THIS SUBMISSION

Metro welcomes the GPOC investigation as a means of stimulating a wide-ranging discussion on appropriate future pricing arrangements for Metro.

This submission addresses the issues detailed in the Terms of Reference issued by the Treasurer and the considerations explicitly identified in the Government Prices Oversight Act that the Commission must take into account. It also provides a range of additional information considered relevant to the investigation.

The following chapters (2-6) present a summary of Metro's submission. For most aspects, more detailed material is provided in the attached appendices.

2. REGULATORY AND OPERATING ENVIRONMENT

2.1 REGULATORY ENVIRONMENT

Metro Tasmania is required to operate within the conditions imposed by a range of regulations, policies and contractual obligations. From a pricing perspective various aspects of the regulatory environment are important.

2.1.1 Statutory Position

The Metropolitan Transport Trust was corporatised on 2 February 1998. The new company, Metro Tasmania Pty Ltd, is a company limited by shares and is incorporated under Corporations Law to perform functions relating to the operation of a public bus transport system.

Authority for actions of the company is contained in its Constitution. It is also subject to the Metro Tasmania Act 1997 (passed in December 1997), which requires that Metro:

- provide road passenger transport services in Tasmania in a manner consistent with sound commercial practice; and
- perform on behalf of the State its Community Service Obligations in an efficient and effective manner as specified in the Community Service Agreement.

Other specific legislation impacting on Metro is the Metro Tasmania (Transitional and Consequential Provisions) Act 1997.

The Minister for Infrastructure, Energy and Resources and the responsible agency, the Department of Infrastructure, Energy and Resources, administer the Acts.

The corporatisation of the MTT under Corporations Law enables the company to operate as a fully commercial entity, focusing on service delivery, with regulatory and transport policy controls reverting to the Department of Infrastructure, Energy and Resources (Transport Division).

Metro now competes on an equal footing with privately owned passenger transport operators and pays all appropriate taxes, rates, duties and tax equivalent payments.

2.1.2 National Competition Policy

The Competition Principles Agreement (1995) signed by Australian Governments as part of the National Competition Policy provides for:

- The structural reform and prices oversight of public monopolies and GBEs and SOCs.
- The removal of competitive advantages enjoyed by GBEs and SOCs where they compete with the private sector (competitive neutrality).

The principle of competitive neutrality referred to in the Agreement requires the removal of any net competitive advantage enjoyed by GBEs and SOCs over private firms, purely as a result of their public ownership. Governments are required to consider corporatising their GBEs including the application of commercial depreciation, commercial rate of return and dividend requirements. Governments have also agreed to apply full taxes or tax equivalent systems, debt guarantee fees, and equivalent regulatory requirements (as those covering private firms) to their GBEs and SOCs.

2.1.3 Contractual Arrangements

Metro's Community Service Agreement with government requires it to provide, as a minimum, timetabled passenger and dedicated school services in Hobart, Launceston and Burnie, subject to funding quantum specified in the contract. The services are provided as detailed in the published timetables for Hobart, Launceston and Burnie and dedicated services current as at 1 July 1997 or as amended in accordance with the contract requirements.

The general obligations of the contract are repeated in part below:

- Comply with all relevant legislation, any licence conditions imposed from time to time and all of its obligations under the Customer Service Charter.
- Maintain all vehicles in accordance with the Traffic Act 1925.
- Charge passengers travelling on the Metro Bus Service the fares set out in the Government Prices Oversight Commission (Metro Fares) Order 1997.
- Ensure that its servants, employees, agents, contractors and others doing business with Metro comply with such policies concerning the Metro Bus Service as may be agreed from time to time between the Purchasing Minister and Metro.
- Maintain a lost and found service.
- Ensure that all vehicles used in the operation of the service are in good mechanical order
- Provide and keep available at all times sufficient vehicles to operator the Metro bus service.
- Produce for inspection any vehicles used in the operation of the Metro Bus Service, at any time after reasonable notice by the Purchasing Minister or an authorised officer.
- Ensure that the number of passengers carried on a vehicle on the Metro Bus Service does not exceed the maximum number of passengers approved for carriage on the vehicle.

2.1.4 Community Service Obligations

Effective from 1 July 1997, the then Minister for Finance issued a Declaration of Community Service Obligations to Metro, the declaration elements are as follows:

- Concession CSO – concessions provided to passengers (under the categories specified in Attachment A to the Declaration), including school children and pensioners; and
- Price/Service CSO – the price differential between a commercial fare and the full adult fare charged by Metro, and for the provision of non-commercial bus services provided by Metro (including late night services, higher frequency in day, weekday and weekend services).

2.1.5 Fares

In an order dated 14 July 1997, the then Shareholder Ministers issued an Order to Metro imposing requirements as follows:

- Provide a fare concession to the categories of passenger listed in Attachment A of the Order; and
- Provide the transport services published as the Metro timetable at fares no greater than the maximum bus fare prices specified in the Government Prices Oversight (MTT Bus Fares) Order 1997 and at a level and standard agreed with the Minister for Transport.

2.1.6 Legislative Reform

Metro as a bus operator is required to abide by all laws applicable to bus passenger operations in Tasmania. The Government introduced a package of legislative reforms impacting on passenger transport services late in 1999, namely:

- Passenger Transport Amendment Bill 1999.
- Passenger Transport (Consequential and Transitional) Bill
- Taxi and Luxury Hire Car Industries Bill; and
- Traffic (Accreditation and Miscellaneous) Amendment Bill.

Elements of these bills will impose requirements on Metro in the same manner as on the remainder of the bus passenger transport industry in Tasmania. The Bills await Proclamation anticipated to occur in May 2000.

2.2 OVERALL POLICY FRAMEWORK FOR METRO'S FUTURE CONTRACTS

The Government has recently passed legislation to reform the public vehicle licensing system. This legislation is expected to be proclaimed in May 2000.

Under the new legislative framework the Government is moving to a purchaser-provider model for the provision of essential ('core') regular passenger transport services, and the free market provision of non-essential bus services.

In non-urban areas 'core' bus services will be provided under a series of individual route contracts, whilst in urban areas services will be provided through a number of integrated area contracts. Contracts will generally be for 5 years with a 5 year extension option and will be performance-based. The exercise of the contract extension will be dependent on operator performance against performance benchmarks. The Government will set the maximum fare levels and minimum service requirements for 'core' services. In some circumstances operators may be prepared to provide core services on a commercial basis in line with these requirements, in which case the services can be registered as commercial and operated under non-exclusive contract arrangements.

In **non-urban areas** a series of industry-initiated area reviews are to be undertaken to ensure the most cost-effective delivery of 'core' services in an area. Within 5 years all non-urban contracts will be reviewed and any contracts that are surplus to requirements can be cancelled, with operators receiving appropriate compensation. The mechanism by which contracts will be reviewed on a long-term basis (ie after the 5 year term and any 5 year extension) will be the subject of a special review sometime during the next 5 years.

In **urban areas** the precise approach to be adopted for reviewing bus services is still being finalised. The basic model that has been developed to date involves first defining the urban areas within which an integrated regular public transport system is to be provided. There are likely to be 8-10 areas including 3-5 areas in Hobart, 2-3 areas in Launceston plus Devonport, Ulverstone and Burnie. 'Core' regular passenger transport services within each of these areas (provided by a mixture of private bus operators and Metro Tasmania) will be subject to a review process on an area-by-area basis so as to ensure their effective integration and coordinated delivery.

Within this framework the current Metro Tasmania Agreement will first be extended for 12 months to 30 June 2001. During this period the process for reviewing urban area bus services will be finalised and the urban areas defined. Metro will then receive a series of performance based service contracts for the services that it undertakes within each of these designated urban areas. There will also be a number of private sector service contracts for routes within these designated urban areas. Finally, all public transport service contracts within each area will be reviewed on an area-by-area basis and replaced by an integrated long-term (5 years with 5 year

extension option) core service area contract. This is the basic model that has been adopted for the development of the new “MerseyLink” service contract in Devonport-Latrobe. Lessons learnt from this initiative will help shape the review process that will apply for other urban areas.

3. METRO OVERVIEW

3.1 SERVICES AND OPERATIONS

Metro provides urban passenger bus services in the Hobart, Launceston and Burnie areas. These operations include scheduled services, school services and a range of charter services. In aggregate, services in these three centres cover some 10.4 million bus kilometres pa and carry 9.6 million passengers pa.

Metro works within a set of service quality standards, which are specified in the Customer Service Charter (issued in July 1997). Performance against these standards is measured by an independent assessment.

Appendix B provides further details on Metro's operations, services and service standards.

3.2 ASSETS

To provide its services, Metro employs 375 full -time equivalent employees and a fleet of 209 buses. The total peak bus requirement is 187 buses. Table 3.1 provides a breakdown of Metro's bus fleet requirements by urban centre. Table 3.2 indicates the number of staff employed to operate services in each centre.

Metro owns a single facility at each of its centres of operations from which depot, engineering and administration services are provided. Table 3.3 summarises Metro's assets by major asset type, location and value.

TABLE 3.1: METRO'S BUS FLEET – 31 DECEMBER 1999

Bus type	Hobart	Launceston	Burnie	Total
Mini buses	4			4
Midi buses	12	8	2	22
Standard rigid buses	107	41	13	161
Articulated buses	22			22
Total	145	49	15	209
Peak Bus Requirement	132	42	13	187

TABLE 3.2: METRO'S STAFF NUMBERS – 31 DECEMBER 1999

Centre	Number
Hobart	284
Launceston	72
Burnie	19
Total	375

TABLE 3.3: ASSET VALUES – 30 JUNE 1999 (\$000)				
	Hobart	Launceston	Burnie	Total
Buses	12883	5201	1328	19412
Ticketing Equipment	473	22	80	575
Land	2754	1010	199	3963
Offices/Other Operating Buildings	3104	767	197	4068
Motor Vehicles	204	18	11	233
Plant & Equipment	426	21	15	462
Bus Shelters and Street Infrastructure	258	48	35	341
Other Assets	350			350
TOTALS	20452	7087	1865	29404

3.3 PATRONAGE

This section provides a summary of Metro's patronage statistics and trends, under three main headings:

- Current Metro Patronage
- Past Metro Patronage Trends
- Some Comparisons with Interstate Cities

Further details on patronage statistics and trends are given in Appendix E.

3.3.1 Current Metro Patronage

The main findings relating to current patronage levels and patterns are as follows (based on 1998/99 statistics except where noted):

- In 1998/99, Metro carried some 9.57 million passengers (total boardings).
- Metro's current patronage comprises 20% full fare adult passengers, 36% adult concession passengers and 44% child/student passengers.
- Most full fare adult passengers use single cash tickets, with lesser use of Metro-10 tickets. The majority of full fare adults use 1-2 section or 3-4 section tickets.
- Most adult concession passengers use Day Tripper tickets. Children/students mostly use either single cash or Metro-10 tickets.
- 91% of Metro's patronage is in the weekday daytime period up to 6.30 pm. (Of the weekday day time patronage 19% is on school special services, 47% is on peak period route services and the remaining 25% on between-peak route services). The remaining patronage is split 1.5% weekday evenings and 7.5% weekends and public holidays.

3.3.2 Past Metro Patronage Trends

Analyses undertaken of Metro's patronage trends over the period 1985/86-1998/99 indicate the following:

- Over the 13 year period, total patronage has fallen by 34% (average 3.2% pa) in Hobart, 38% (3.4% pa) in Launceston and 26% (2.3% pa) in Burnie.
- Over the 13 years, full adult patronage has fallen most sharply, by 57%. Adult concession patronage has fallen 24% (but increased in recent years), and child/student patronage has fallen 25%.
- Over the period, there have been small increases in total services supplied (bus kilometres). As a result average bus loadings have fallen by around 35% - 40%.

3.3.3 Some Interstate Comparisons

Comparisons of Metro's patronage trends since 1985/86 with bus patronage in a number of interstate smaller/medium size centres indicates that the Metro rate of decline in patronage (per population of the catchment area) is well within the range of decline rates found in the interstate centres.

Also current patronage levels (per population) in the three Metro centres are found to be close to the levels expected from the interstate data, having regard to their population levels, fares and service levels.

3.4 MARKET ROLE AND PROFILE

This section provides a summary of information on Metro's position in the urban travel market – in terms of market share, user profiles, and attitudes and preferences of bus users and non-users. More details are given in Appendix F.

3.4.1 Market Shares

In overall terms, Metro carries about 3.1% of all trips made in Hobart, 2.3% of trips in Launceston and 0.9% of trips in Burnie.

Statistics by trip purpose indicate that:

- The bus market share for work trips is significantly higher than for trips overall, and in particular higher for CBD-oriented work trips. Metro caters for about 15% of all work trips to/from the Hobart CBD.
- For school trips, the bus market share is estimated at 20-25% for Tasmanian urban areas overall.

For the three centres combined, approximately 11% of the population uses buses more than occasionally (ie at least once per week).

3.4.2 Market Profile

Only 20% of Metro's passengers are on full-fare tickets (down from 35% ten years ago). The remainder use some form of concession tickets. The majority of Metro's users are people who are not employed (home-makers, students, pensioners, unemployed) or those in relatively poorly-paid jobs.

Only a small proportion of Metro's passengers are users by choice, in the sense of having a car available for their trip but using the bus in preference.

Thus it is apparent that Metro's primary role at present is catering for the transport disadvantaged (those without a car available), many of whom are also economically disadvantaged. Only to a lesser extent does Metro provide a practical alternative for people with a car available, and hence contribute to reducing traffic congestion and its adverse environmental impacts.

3.4.3 Attitudes and Preferences

Key findings from a number of market surveys undertaken in the last few years include:

- The major reason given for use of the bus was lack of a car for the trip. Other reasons related to 'convenience', lack of parking problems, and cost advantage over the car.
- The main factors discouraging car users from travelling by bus related to 'convenience' aspects including infrequent services, services don't go near desired destination, services too slow, etc.
- Most car users did not envisage switching to bus under any conditions. However, the service improvements most likely to encourage them to switch related to higher service frequency, to-door services, followed by cheaper fares and more convenient/faster routes.
- Most bus users rated Metro's performance as satisfactory overall. Significant features for which Metro was rated relatively poorly included the suitability of services (frequency, etc) and the limited information at bus stops.

3.5 FINANCIAL PERFORMANCE TRENDS

Key operational, patronage and financial statistics for Metro over the last ten years (1989/90 – 1998/99) are set out in Appendix A.

Key indicators of trends in financial performance over the 10 year period include (in real terms):

- Cost to Government for the provision of services – decreased by 14%.
- Operating expenditure per bus kilometre (excluding abnormal items) – decreased by 29%.
- Subsidy per passenger trip – decreased by 1%.

3.6 MANAGEMENT INFORMATION SYSTEMS & SERVICE PLANNING

Appendix G summarises relevant information on:

- Metro's service planning and review process
- Metro's management systems, which assist in this process and in ongoing monitoring and reporting.

3.7 RECENT SERVICE INITIATIVES

Appendix H summarises various service level and service quality improvements that Metro has implemented since 1996, with the overall objective of better meeting customer needs (and hence increasing patronage).

In relation to some of these service initiatives, Appendix J also provides notes on their impacts in increasing patronage.

3.8 ACCESSIBILITY POLICIES

In May/June 1999, Metro completed the development of an Action Plan with the aim of improving access for people with disabilities to bus services provided by Metro.

The Plan was developed by consultants working with Metro over a 6-month period (Nov 1998-May 1999), and involved widespread consultations with individuals with disabilities, organisations and other key stakeholders (such as local government).

The actions and strategies outlined in the Plan aim to reflect the needs, priorities and issues identified by those who participated in the consultations. It also aims to reflect the principles and intent of the Federal Disability Discrimination Act 1992 and the Draft Disability Standards for Accessible Public Transport 1995. These Standards have been agreed in principle by the Federal Government, but the basis of funding for the required accessibility improvements is not yet resolved. The Tasmanian Government has indicated to the Federal Government its requirement for funding to meet the obligations arising from the Standards.

In essence, the Action Plan outlines the strategies and actions to be taken by Metro, including the timing of actions, cost implications and the allocation of responsibilities for implementation. The Plan would involve progressive improvement of accessibility to Metro's services, with full accessibility being achieved at latest by year 2020. Metro estimates total costs for implementation of the Plan over the 20 year period at some \$18 million.

Four broad areas for reform are identified in the Action Plan:

- i) Physical Access
- ii) Customer service and Service Improvements
- iii) Communication, Information and Consultation
- iv) Employment.

Within each of these areas, a number of key actions are proposed, as detailed in the Action Plan itself.

In addition to the lodgment of its Action Plan, at an operational level Metro is continuing to identify and implement appropriate driver training modules designed to assist drivers in meeting the needs of people with mobility disabilities.

It is envisaged that no new vehicles will be purchased until 2001/02. As such, the introduction of more accessible vehicles will not gain momentum until that time.

3.9 OPERATIONAL AND COST EFFICIENCY

3.9.1 Recent Benchmarking Assessment

Metro's operational and cost efficiency was recently re-examined as part of the Australian Bus Benchmarking Assessment by consultants Booz Allen and Hamilton (BAH) for Metro and other public operators. This assessment examined:

- Metro's efficiency and unit cost levels in 1998/99 (for each of the three Metro centres) compared with four interstate public operators and six interstate private operators of urban route bus services.
- Trends in Metro's unit cost levels since 1992/93 (in absolute and real dollar terms and relative to other operators).

Appendix J presents the provisional findings from this Assessment. In summary, the key findings are as follows:

- Metro's 1998/99 unit cost performance is better than that of the interstate public operators assessed, by a significant margin.
- Since 1992/93 (the first year for which data are available), Metro has made significant progress in reducing its unit costs, with an overall reduction (excluding bus capital charges) of about 15%; most of this reduction (10%) has been achieved since 1995/96. The main cost reductions have been in the areas of cost of drivers and bus repairs/maintenance. Bus capital charges have also been reduced substantially.
- A substantial unit cost gap still remains between Metro and efficient private operators. Metro's overall unit costs (excluding bus capital) need to reduce by 19% to achieve the average for the private operator sample surveyed. The major components of this cost gap are (in descending order of size) cost of drivers, bus repairs/maintenance, and overheads.

3.9.2 Review of 1997 Commission Findings on Cost Efficiency Issues

In its 1997 Final Report the Commission made its primary recommendation concerning maximum revenues of Metro. The Commission noted the need to achieve benchmark costs that equated to \$2 million savings in operating costs from 1996/97 budgeted costs. The complete narrative is repeated hereunder in respect of that recommendation.

“Recommendation of Maximum Revenues

The Commission's primary recommendation concerns the maximum revenue the MTT needs from fares and Government contributions to deliver the services required by Government. This revenue should be no more than that required to meet an efficient level of costs and to provide a commercial return on an optimum set of assets.

The Commission recommends that the total revenue from fares and Government contributions be no more than \$28 099 000 per annum (expressed in 1996/97 currency) for the current levels of timetabled services required of the MTT.

This amount is derived from 'benchmark costs' which the Commission believes could be achieved by the MTT in an environment where other operators could compete to provide transport services. The Commission notes that achievement of the benchmark costs would require substantial change in conditions of employment and changes in the environment in which the MTT operates.

Benchmark operating costs are approximately \$2 million (8 per cent) less than MTT budgeted costs. Most of the difference is attributable to driver labour costs. These would need to reduce by 15 per cent to meet benchmark levels and would require both changes in employment conditions and gains in productivity.

MTT budgeted ownership costs are made up of depreciation and financing costs, but do not include a return on funds employed in the business. Benchmark ownership costs include depreciation charges and an allowance for a commercial return on assets necessary to provide the current level of services. Benchmark ownership costs are greater by approximately \$2 million per annum, most of which is due to the return on assets that would be expected in a commercial operation.

In aggregate, benchmark costs are comparable with MTT budget estimates for 1996-97. Achievement of productivity improvements and cost reductions should enable the MTT to generate a profit and a return on funds invested in the business.”

The Commission's 1997 target for reductions in operating costs of \$2.0 million pa has now been largely achieved. In 1998/99 recurrent expenditure was \$1.8 million below the base (1996/97) level. There was a further \$1.3 million saving through reduced depreciation and interest charges. This outcome results in cost reductions totalling some \$3.2 million.

The Commission noted that substantial change to conditions of employment and the environment in which Metro operates would need to occur if the targets were to be achieved. There have been dramatic ongoing changes occurring including the corporatisation of the MTT. In addition restructuring of company administration, maintenance and bus operations has occurred. These changes have delivered the cost savings. The matter of reduced driver costs by the 15% identified did not fully eventuate. Whilst many improved work practices have been introduced, there remains a gap between the rates of pay and award conditions of Metro drivers and those of the privately owned bus company drivers.

Metro will continue to work with employees and unions to enhance productivity so as to maximise use of its human resources. It is accepted that improvements in utilisation and costs must and will occur continuously. However, the matter of unit rates and award conditions are intrinsically linked to the ownership structure of Metro. Metro believes that a stated aim of attaining private sector award rates and conditions is not achievable in the current situation. Such an aim in fact requires existing Metro drivers to accept a reduction in wages of some 16%. This will not occur in the absence of a compelling reason. If such a reason eventuates, (head to head competition or privatisation) there will in all likelihood be a requirement for a compensation package of some form.

Enterprise agreements have been agreed in maintenance and clerical areas of Metro, and in addition Australian Workplace Agreements are in place for a number of middle management positions. In respect of drivers there is no current Enterprise agreement. This group of employees generally have declined to negotiate changed conditions in return for wage outcomes. As a result of those circumstances drivers received safety net adjustments awarded by the Australian Industrial Commission. It is intended that changes be pursued with a view of reforming arrangements and improving productivity and efficiency through an Enterprise agreement negotiated with the Rail, Tram and Bus Union.

Metro has a strong commitment to industrial relations practices that are participative and feature consultation with negotiated outcomes: it has a healthy relationship with all employee organisations. The results achieved thus far are evidence that such an approach is delivering desirable outcomes. Metro does not intend embarking on a program that will require an aggressive confrontationalist approach in an attempt to achieve wage targets that are unrealistic.

4. METRO PROSPECTS AND PROPOSED INITIATIVES

4.1 FUTURE DEMAND PROSPECTS

As part of the Metro 'Demand Forecast' project, (BAH) developed a set of 'base' projections of patronage trends for each of the three Metro centres over the next 15 years. These 'base' projections allow for expected changes in patronage arising from changes in:

- Total population (ABS forecasts)
- Age distribution of population (ABS forecasts)
- Employment levels (BAH estimates)
- Car ownership (BAH estimates)
- Other factors (related to time).

They assume no changes in fares (real terms) or service levels (or other service initiatives). They also assume no changes in current transport and development policies.

Key features of these projections over the 15 year period are as follows:

- Population is predicted to fall by 6% in Hobart, 9% in Launceston and 10% in Burnie.
- Average public transport trips per person are predicted to decline by about 20% as a result of the ageing of the population and trends in employment; and by a further 7% - 10% as a result of increasing car ownership and other factors.
- Overall average public transport trips per person would reduce by 27% - 30% in the three centres; and total public transport trips reduce by 33% - 37%.

These projections for the average public transport trips/person to fall by 27% - 30% (approximately 2% pa) are sensibly consistent with experience over the last 15 years.

4.2 PATRONAGE AND REVENUE ENHANCEMENT INITIATIVES

The recent Metro/BAH 'Demand Forecast' project has recommended a series of initiatives to enhance Metro's patronage (and fare revenues). These are set out in Table 4.1, under four main headings:

- Service Enhancement Initiatives
- Asset and Infrastructure Initiatives
- Marketing, Information and Customer Care Initiatives
- Monitoring, Research and Planning Initiatives.

At this stage, these initiatives are supported in principle by Metro. As part of Metro's forthcoming Corporate Plan updating, these initiatives will be developed and appraised in more detail and a prioritised Action Plan defined.

Pending this more detailed work, no estimates of the cost, patronage and revenue impacts of these initiatives have been made. However, based on a range of experience in other urban bus systems, Metro would comment as follows:

- A once-off patronage increase in the order of 10% from the package of service and marketing/ information initiatives might be expected if fare levels and the total amount of service provided are unchanged.
- A 50% increase in off-peak services overall might result in a total patronage increase in the order of 5-10%.
- A reduction in (real) average fares of 50% might result in a patronage increase in the order of 15-20%.

These three effects are largely additive, but are of a once-off nature. If all were implemented, they would broadly counteract the projected decline in 'base' demand over the next 15 years, ie in 15 years time the total patronage level would be similar to the current level. However Booz Allen & Hamilton advise that, if less substantial (or no) improvements in service levels and/or reductions in fares are implemented, then it is probable that overall patronage will continue to fall, despite any efforts of Metro management.

TABLE 4.1 : PROPOSED PATRONAGE ENHANCEMENT INITIATIVES		
Measure Type	Components/Description	Additional Comments
A. SERVICE ENHANCEMENT INITIATIVES		
Overall Network Restructure	<ul style="list-style-type: none"> • Network and service review and restructure, by contract area/sector, within the following principles: <ul style="list-style-type: none"> - simplification of route structure - consistent set of service standards (to be developed) - peak emphasis on fast, direct services for commuters; off-peak emphasis on local services targeted to captive/ dependent users - ensure maximum vehicle utilisation and minimum peak vehicle requirements at peak periods - increase shoulder services (eg post PM-peak) - increase off-peak level of service (including evening/weekends), particularly where achievable within existing driver resources - services at regular intervals (with clock face timetables) - redeploy resources from poorer demand services to better demand services. 	<ul style="list-style-type: none"> • Principles designed to provide most efficient utilisation of resources in peak (where marginal costs of additional service are very high); and to increase off-peak services (where marginal costs are low, market most dependent, and elasticity is highest). Services at all periods to be better oriented to user needs where this is possible.
Major Commuter Services	<ul style="list-style-type: none"> • Review of express/limited stop service policy (HBA), and appraisal of current services against this policy, with a view to adjustments/enhancements as warranted to maximise overall patronage with efficient use of resources. • Policy needs to balance benefits of express/limited stop services for longer-distance passengers against disbenefit to local passengers of fewer stopping services. 	
Local (Off-Peak) Services	<ul style="list-style-type: none"> • Off-peak (all periods) services to be progressively reviewed, with a focus on better meeting the needs of captive/ dependent users and with a large measure of local orientation. <p>Principles will be</p> <ul style="list-style-type: none"> - focus on local shopping centres, community facilities etc - good connections with line-haul services where required (but through services where substantial demand) - regular interval timetables (and clock face where possible) - good coverage of residential areas - easy-access vehicles - customer-friendly attitudes by staff. <ul style="list-style-type: none"> • Optimum services (determined through service reviews) likely to be a mix of: <ul style="list-style-type: none"> - 'conventional' through routes to/from CBD - 'conventional' local services, allowing interchange with CBD services - fixed route hail+ride services, with easy access midi/minibuses (eg Shopper Stopper) - demand-responsive (fixed route with deviations) services covering local residential areas (phone bookings, 'low tech' approach) - services operated by (maxi) taxis in low demand situations. <p>Optimum types of off-peak services in each area to be determined in service review process, in the light of all (Metro/other) experience to date.</p>	<ul style="list-style-type: none"> • Expansion of off-peak services generally likely to result in some subsidy increase, although overall reduction in subsidy/passenger. (As an indication, 50% extra off-peak service might generate 20-30% additional off-peak patronage with a 10% increase in overall subsidy).

TABLE 4.1 : PROPOSED PATRONAGE ENHANCEMENT INITIATIVES (Cont'd)		
Measure Type	Components/Description	Additional Comments
Student Services	<ul style="list-style-type: none"> Review Metro policies towards carriage of school children, followed by service redesign (by area/sector), having regard to: <ul style="list-style-type: none"> merits of carrying children on route v school special services minimising overall peak vehicle requirements (including staggering times of school services if appropriate) most appropriate type and size of vehicles policies and practices of actual or potential competitors for carriage of school children. 	
B. ASSETS AND INFRASTRUCTURE INITIATIVES		
Vehicles	<ul style="list-style-type: none"> Optimum fleet size/composition for each centre to be determined, having regard to: <ul style="list-style-type: none"> minimisation of total peak vehicle requirement to provide peak (commuter + school) services minimisation of spare bus requirements (less than 10%) meeting DDA requirements mix of smaller (midi/mini) buses sufficient to provide off-peak services where desirable (coverage of residential areas, etc), provided these vehicles can be effectively used in peak periods and subject to the availability of robust, cost-efficient easy-access vehicles. review of the relative economics of artic, standard rigid and stretched rigid buses, before any decision on replacement of present artic buses peak period patronage projections for each centre. 	
Bus Stop Facilities	<ul style="list-style-type: none"> Develop and implement a program for shelters and seats at bus stops. Priorities to be based on average numbers of boarding passengers/day at each stop, having regard to age, etc. 	<ul style="list-style-type: none"> Future responsibilities Metro v DIER local government to be clarified.
Bus Priority Measures	<ul style="list-style-type: none"> For consideration where measures may ameliorate specific running time/reliability problems. May include with-flow bus lanes, contra-flow bus lanes, signal priority, bus 'gates', etc. 	<ul style="list-style-type: none"> Measures would need to be developed in conjunction with local government.
C. MARKETING, INFORMATION AND CUSTOMER CARE INITIATIVES		
Information at Bus Stops	<ul style="list-style-type: none"> Expedite the implementation of the program for information at bus stops. Information to include routes, timetables, fares. Priorities to depend on numbers of boarding passengers, numbers of services 	<ul style="list-style-type: none"> Real-time information unlikely to be economic at this time (Metro to keep watching brief on developments and experience elsewhere).
Information Distribution (general)	<ul style="list-style-type: none"> Increase distribution of information to potential customers, eg: <ul style="list-style-type: none"> information packs to new households service information and advertising in local council publications information packs to schools 	<ul style="list-style-type: none"> Need to liaise with local government and make use of their network and distribution systems to distribute PT information and marketing material.
Individualised Marketing Campaign	<ul style="list-style-type: none"> Develop an 'Individualised Marketing' campaign and pilot in one area. Objective would be to overcome initial resistance to trying the services and to provide greater confidence in ongoing use of the services. Campaign to be developed based on experience gained in such campaigns elsewhere in Australia and internationally. 	
Driver-Bus-Service Policy	Where possible (without requiring additional resources), pursue policy of retaining the same driver on a given service, and with the same bus.	

TABLE 4.1 : PROPOSED PATRONAGE ENHANCEMENT INITIATIVES (Cont'd)		
Measure Type	Components/Description	Additional Comments
Vehicle Branding/ Livery	<ul style="list-style-type: none"> Where possible, have dedicated groups of vehicles on particular services and 'brand' them distinctively (eg Busy Bee). 	
Vehicle Cleanliness	<ul style="list-style-type: none"> Optimize standards of bus cleanliness (interior and exterior). 	
Service Reliability	<ul style="list-style-type: none"> Review causes of unreliability and take action (if appropriate) to further improve present reliability levels. 	<ul style="list-style-type: none"> Reliability important to users and potential users.
'Customer Care' Training	<ul style="list-style-type: none"> Review and enhance 'customer care' component of training for drivers and other 'front-line' staff. 	<ul style="list-style-type: none"> Driver and staff attitudes important to customer perceptions and use of bus. Performance Tracking suggests scope for improvement.
D. MONITORING, RESEARCH AND PLANNING INITIATIVES		
Market Research Program	<ul style="list-style-type: none"> Revamp and enhancement of market research program, including the following aspects. Closer monitoring of market share and issues of bus competition. Use of market research to market test new initiatives before implementation. Systematic monitoring of the patronage (and resource) impacts of service initiatives. 	
Service Performance Monitoring	<ul style="list-style-type: none"> System to enable regular monitoring of patronage and financial performance of each service (by route/time period). 	
Area/Sector Service Reviews	<ul style="list-style-type: none"> Develop principles and procedures for these proposed reviews, pilot them in the first review and then modify as appropriate. To include development of service standards. To include development/application of community consultation/involvement program. 	
Planning of New Developments	<ul style="list-style-type: none"> To develop guidelines/principles for transit-friendly design of new developments. To lobby with DIER and local government to ensure these principles are followed in all new developments and redevelopments. 	

4.3 EXPECTED EFFICIENCY INITIATIVES

Metro will continue to introduce measures that provide for greater resource utilisation in the area of human resource management, fleet management and depot infrastructure.

At the end of the current financial year, Metro's full-time equivalent establishment will have decreased from 429 in 1996 to 375. These reductions are a consequence of improvements in utilisation, and reductions in corporate staff.

Metro's unit costs have been reduced significantly (about 10% in real terms, excluding bus capital charges) since 1995/96 but they continue to compare unfavourably with private operator costs.

Metro's current spares to peak bus ratio stands at 11.9%. This will be reduced to 9.6%.

Metro's patronage per bus kilometre is 0.9. It was planned that by the year 2000, Metro would return to levels enjoyed in 1986 of 1.3 passengers per bus kilometre. This has not been achieved

despite the heavy promotion of the use of public transport and attempts at better-matching service demand with service provision. Metro commissioned a study into Patronage Trends in Tasmania, from which it is apparent that the downward trend is consistent with public transport usage nationally and internationally. It is predicted that in the Tasmanian context there is little likelihood of improved usage without increasing cost to government through greater subsidies. This scenario is unlikely in the current economic climate and the overall financial position of the state.

Notwithstanding the patronage decline trend, it remains Metro's intention to ultimately halt the decline, the rate of which appears to be lessening in the current year. The Corporate Plan strategy provided for the decline to be halted in the year 2001/02. However the impact of the GST is now likely to make this ambitious target impossible to attain.

As a consequence, the revised Corporate Plan for the period 2000 through 2003 will re-forecast patronage to reflect a further decline, with a target halt date now planned for the year 2003/04. The halt will be achieved following strategies and plans emanating from the independent patronage study referred to above.

Table 4.2 identifies specific initiatives that Metro expects to introduce to improve productivity and efficiency levels.

Table 4.2 : PROPOSED EFFICIENCY INITIATIVES	
Aspect	Initiative Components/Description
Infrastructure and Depots	<ul style="list-style-type: none"> • Review vehicle usage to establish if utilisation can be improved so as to reduce peak bus requirements. • Review depot operations to establish if those assets are being deployed to best advantage. • Establish alternative options to owning and operating depot facilities. • Continue to identify means for reducing 'dead-running' kilometres. • Examine, and where practicable, exploit new technologies to improve service delivery, efficiency and productivity.
Employee and Industrial	<ul style="list-style-type: none"> • Negotiate work practice changes for bus operators through the EBA process • Development of a culture of continuous improvement using teams as the primary vehicle. • Review management, supervisory and administrative positions with a view of achieving greater efficiency and productivity • Maximise operational efficiency through examining extensions in part time, casual and temporary employment arrangements.

4.4 IMPLICATIONS OF NEW TAX SYSTEM

One of the specific matters that GPOC is required to take into account in this review is *"The effects of the Goods and Services Tax and other elements of the New Tax System on the pricing policies of Metro"*.

The impact of the Goods and Services Tax (GST) charged on Metro's outputs will be to increase total costs by 10%. However, this increase will be mitigated by removal of Wholesale Sales Tax (WST) currently charged on certain inputs, and by the fuel duty rebate applicable to Metro. Metro's initial modelling indicates that the resultant net cost increase (post-GST) will be about 4.7%. Most of this cost increase will occur from 1 July 2000.

Consistent with ACCC pricing guidelines, fares may be increased by up to 4.7% in response to this cost increase. In the absence of any demand elasticity effect, increases of 4.7% in both fares and CSO payments would be sufficient to maintain Metro's bottom-line financial position (in the absence of the tax changes). Also, the impact of the taxation changes on Metro's cash-flow is likely to be only marginally beneficial (because of timing changes).

However, two additional important issues need to be addressed:

- (i) Metro patronage levels are likely to be adversely affected by a combination of factors arising from the New Tax System:
 - Expected reductions in car purchase prices in the order of 10%.
 - Any fare increases (as above).
 - Reductions in personal tax rates, and hence increases in disposable incomes.

It seems likely (but in the absence of detailed modelling) that the combination of the above factors, assuming a 4.7% fare increase, would result in a patronage reduction of approximately 2% - 3% in the short/medium term. A 2.5% patronage reduction would result in a reduction in fare revenue of about \$180,000 pa.

- (ii) ACCC pricing guidelines may prohibit an increase in any individual fare exceeding 4.7%. If so, because of the practical needs for 'rounding' of fares, this would result in an effective average fare increase of significantly less than 4.7%.

4.5 ASSET REPLACEMENT AND NEW INVESTMENT

4.5.1 Capital Works Program - Overview

Table 4.3 below outlines Metro's proposed capital works program as detailed in the Corporate Plan 1999-2002 and amended by subsequent events.

TABLE 4.3 : PROPOSED CAPITAL WORKS PROGRAM (\$000)				
Item	Actual 1998/99	Estimated Actual 1999/00	Proposed 2000/01	Proposed 2001/02
Bus purchases:				
- new buses		75	882	2699
- refurbishment of buses		150		
Total — bus purchases		225	882	2,699
Purchase of subsidiary:				
- route licences	161			
- buses	1,326			
Reorganisation				250
Ticketing system replacement			300	300
Service improvements	58	193	150	150
Management information system:				
- upgrade existing	98	173	100	100
Miscellaneous minor works & replacement plant & equipment	393	438	250	250
GRAND TOTAL	2036	1029	1682	3749

4.5.2 Bus Fleet

In terms of capital acquisitions, the bus fleet represents the main commitment. The following information is provided to demonstrate the historical and likely future bus purchases.

Prior to 1985, buses had been purchased on an ad hoc basis and not in accordance with a structured replacement program. This resulted in an uneconomic fleet age profile.

In 1986 Metro implemented a regular and ongoing bus replacement program to even out bus purchases and attain a reduction in the average fleet age from 12 years then to 7.5 years, over a 9 year period. Based on certain assumptions this required a delivery rate of 25 buses per annum.

This program facilitated a more stable financial plan for bus purchases and a reduction in maintenance costs. New buses were more passenger and environment friendly.

During the last five years, efficiencies gained in bus operations have enabled a reduction in the number of drivers and buses. This was largely brought about by the introduction of the computerised driver rostering system (Austriacs).

The reduced need for buses was particularly noticeable during the third of the three-year contracts for supply of 75 buses, to the extent that the contract was reduced to 60 buses over 2.5 years. At the end of this contract the average age of the fleet was approximately 5 years.

It was subsequently decided not to purchase buses for at least two years to stabilise the average age at approximately 9 years.

Since that time, further reviews and reductions in service levels have enabled a reduction in fleet requirements. As at December 1999, four years after the last bus purchase, the average age is 8.9 years.

Table 4.4 shows the change to average fleet age up to the year 2002 based on purchasing 4 buses in 2000/01 and 10 buses in 2001/02. It is assumed that the service levels and fleet requirements are the same as at December 1999 and the purchase price of a bus is based upon \$280 000 per unit at December 1999 (indexed annually).

TABLE 4.4 : BUS PURCHASE AND AVERAGE AGE PROJECTIONS				
Date	No. per year	Estimated Average Fleet Age (Years)	Expenditure based on \$280,000 per bus in December 1999 (5% inflation in 2000/01 and 2% thereafter) \$000's	Total Outlay \$000
December 1999		8.9		
December 2000	3	9.5	1,176	
December 2001	10	9.8	2,999	4,175

4.5.3 Ticketing System

The existing Metrofare electronic ticketing system in Hobart and Launceston was purchased in 1987 and commissioned in 1988. A significant software upgrade in 1995/96 financial year enabled the life of the system to be extended to the year 2000.

It is planned that a replacement system be purchased for Hobart and Launceston at an estimated cost of \$600,000.

4.5.4 Asset Sales

Sale of buses, surplus to requirements, will be undertaken in accordance with previous practices.

A review of property assets will take place to establish if more cost-effective options for providing services and utilisation of assets are achievable.

4.6 METRO PERFORMANCE OBJECTIVES

4.6.1 Financial Performance Objectives

Metro is seeking to negotiate a contract with the Government to provide a return on equity. The current three year contract which expires on 30 June 2000 is based upon recovery of incurred costs and does not provide for a commercial return. Table 4.5 provides information on Metro's financial performance objectives.

TABLE 4.5 : METRO'S FINANCIAL PERFORMANCE OBJECTIVES (for year ended 30 June)				
Objective	Previous Year 1998/99 Actual	Current Year 1999/00 Estimate	Year 1 2000/01 Planned	Year 2 2001/02 Planned
Return on Equity (%)	3	0	8	8
Debt to Equity Ratio (%)	43.5	39.5	36.2	35.3
Return on Assets (%)	2.2	1.3	5.0	4.8
Interest Cover Ratio (%)	183	100	377	419

4.6.2 Non-Financial Performance Objectives

Financial targets alone will not guarantee improved efficiency and productivity, hence the need for other policies and performance measures to maintain services standards and so on. A number of these additional measures have been incorporated in Metro's Corporate Plan as 'non-financial objectives' (see Table 4.6).

TABLE 4.6 : METRO'S NON-FINANCIAL PERFORMANCE OBJECTIVES (for year ended 30 June)				
Objective	Previous Year 1998/99 Actual	Current Year 1999/00 Estimate	Year 1 2000/01 Planned	Year 2 2001/02 Planned
Boardings per km	0.92	0.89	TBA	TBA
Employees (full time equivalents) per million km)	36.2	35.3	35.5	34.9
Employees per peak bus	1.9	2.0	2.0	2.0

4.6.3 Distribution Targets

Metro is seeking to establish a dividend policy and Table 4.7 shows current and proposed future payments to Government.

TABLE 4.7 : METRO'S DISTRIBUTION TARGETS				
Item	Previous Year 1998/99 Actual	Current Year 1999/00 Estimate	Year 1 2000/01 Planned	Year 2 2001/02 Planned
Wholesale Sales Tax				
- Recurrent Expenditure	321	348		
- Capital Expenditure	39	120		
Dividends			1300	1300
Guarantee fees	38	38	34	31
Land Tax	76	68	68	68
Stamp Duty	10	10	10	10

4.7 COMMUNITY SERVICE OBLIGATIONS

Metro performs its Community Service Obligations on behalf of the Government. These are defined in orders issued by the Shareholder Ministers dated 1 July 1997 and 14 July 1997; and are specifically referred to in a contractual agreement between Government and Metro which expires on 30 June 2000. The following extracts from Ministerial Declarations and the schedule from Metro's Contract are provided for information.

- *"Concession CSO – Concessions provided to passengers (under the categories specified in Attachment (A), including school children and pensioners; and*
- *Price/Service CSO – the price differential between a commercial fare and the full adult fare charged by the Metro and for the provision of non-commercial bus services provided by the Metro (including late night services, higher frequency in day, weekday and weekend services).*

This declaration takes effect on and from 1 July 1997."

Community Service Obligation Schedule 1 of Agreement (Extract)

"Metro shall provide the following Community Service Obligations:

- (a) as specified in the Joint Direction by the Minister for Transport and Minister for Finance issued under Section 65 of Government Business Enterprises Act 1995 (see Annexure B); and*
- (b) the declaration made by the Minister for Finance under Section 61(3) of the Government Business Enterprises Act 1995 (see Annexure C)."*

Metro fares are required to be consistent with Government Prices Oversight Commission (Metro Fares) Order 1997.

Metro anticipates that an extension of the existing agreement with amendments for a one year period will occur. A review process will take place prior to December 2000, the outcome of which will determine the nature and extent of the ensuing services and contract.

4.8 FORECAST FINANCIAL PERFORMANCE

Metro has outlined five key result areas in its Corporate Plan involving the following major objectives:

- Increase passenger loadings per kilometre.
- Successful competition with private operators in the provision of all services both within and outside current operating areas.
- Reduce operating costs in real terms.
- Improve financial performance of revenue generating non-core activities such as on-bus advertising.
- Introduce best practice human resource and industrial relations policies.

The financial impact of the measures already taken and those proposed, to achieve these objectives, are shown in the financial projections in Table 4.8.

TABLE 4.8 : METRO FINANCIAL PROJECTIONS (\$000)				
Item	Actual 1998/99	Estimated Actual 1999/00	Proposed 2000/01	Proposed 2001/02
Revenue				
Government cost of contract	18300	18725	19837	20164
Non-government contract revenue				
• Operating Income	7809	7574	6738	6645
• Contribution from Subsidiary		107	107	107
• Interest and lease Income	651	293	353	494
• Leasing Income		170	324	27
• Bus Advertising, Rentals and Other	890	1011	1047	1106
Total Revenue	27650	27880	28406	28543
Expenses				
• Operating	23740	24455	23611	23808
• Interest	522	485	470	407
• Depreciation	2953	2940	3025	3028
Total Expenses	27215	27880	27106	27243
Operating Revenue before Abnormal Items and Tax	435	0	1300	1300

5. REVIEW OF METRO FARES

5.1 CURRENT METRO FARE SYSTEM

For some years, Metro's overall fare policy has been that:

- the basic fare structure has been distance-related, in a way which generally reflects costs and perceived value of travel;
- lower off-peak fares are offered, reflecting lower costs of service provision and reduced willingness to pay;
- overall fare levels have been adjusted from time to time resulting from the Government's revenue targets; and
- concession fares are offered to specific groups, as required by Government.

The Metro fare structure comprises five fare types (single, daily, 10 trip, 10 day and monthly) and six fare levels (adult, adult concession, family, children and school students, full time tertiary students and parcels). Fares vary according to the number of sections travelled and time of travel (ie. some off-peak fares are available).

The distance -related scale was modified on the introduction of the Crouzet Electronic Ticketing System and has been further adjusted with subsequent fare increases.

Metro applies the same fares in Hobart, Launceston and Burnie. The current fares are set out in Table 5.1.

TABLE 5.1: METRO BUS FARES — JANUARY 2000

Category	Single	Daily	10 Trip	10 Day	Month
Adult					
Section 1-2	1.20		9.60		
3-4	1.60		12.80		
5-7	1.90		15.20		
8-10	2.10		16.80		
11-15	2.80		21.60		
Off-peak multi trip		3.10		24.00	
Adult concession					
All sections	1.20		9.60		
Concession off-peak multi-trip		1.90		15.20	
Seniors all day multi-trip		2.10		18.00	
Family					
Family off-peak multi-trip		9.00			
Children & school students					
Under 5 years of age					
— other than to/from school or day care centre			no charge		
— day care centre group travel	.60				
Child Under 16 years of age					
— all sections	1.20	1.90	9.60		38.40
Tertiary Students (full time)					
Section fares	As per adults		10.00		40.00
Tertiary off-peak multi-peak		1.90		15.20	
Parcels					
— other than passengers' luggage of approved size & weight		1.20			

5.2 PAST FARE TRENDS AND DEVELOPMENTS

In the period 1985-1991, Metro's fares were generally adjusted annually. Since 1991, there have been only two fare increases:

- January 1995: increase of around 10% on adult and child cash fares, around 5% on adult and child 10-trip fares.
- July 1996: further increase of around 10-15% on adult and child cash fares, around 20% on adult 10-trip fares (to standardise the discount on these fares at 20% relative to cash fares). Fare revenue was budgeted to increase by 14.5% (for a full year), but target was not achieved.

5.3 GPOC 1997 FARES INVESTIGATION AND SUBSEQUENT DEVELOPMENTS

In February 1997, GPOC completed its investigation of Metro's pricing policies and presented its recommendations in regard to the maximum fares that Metro should charge during the period of three years from July 1997.

In the Foreword to its report, GPOC commented that:

"The Commission's primary recommendation is in regard to the maximum revenue required to deliver Metro services at an efficient level of costs.

Passenger fares account for about 25% of MTT revenues, with most of the revenue provided by Government as subsidy and deficit funding. The setting of fares depends in large measure on the amount the Government is prepared to contribute for Metro services. Since the Government has not at this stage determined the amount it is prepared to pay in the future, the Commission has not been able to recommend specific Metro fares.

The Commission has developed a set of principles which it believes would deliver a fare schedule that better reflects the cost of providing Metro services. The Report includes a schedule of fares based on these principles and an estimate of the associated revenue as an indication for Government of the potential financial outcomes."

Table 5.2 sets out the GPOC 1997 recommendations and summarises the actions taken in relation to them. It is worth noting that:

- Government decided to limit changes to fares to the Tasmanian CPI (All Groups) movement. Fare movements were based on their value as at 30 June 1997.
- Government funding for the three year period has been set at essentially a constant level in real terms (relative to CPI). There has been no adjustment between 1997/98 and 1998/99 and a below CPI adjustment in 1999/2000.

TABLE 5.2 : GPOC 1997 RECOMMENDATIONS AND CURRENT STATUS

Recommendations	Current Status								
A: The Commission recommends that the total of fare revenue and Government contribution be no more than \$28,099,000 pa (expressed in 1996/97 currency) for the current levels of timetables services required of the MTT.	<ul style="list-style-type: none"> • The Government agreed to the revenue projection of \$28,099,000 and has based its funding of the Community Service Obligations for the years since 1997/98 (1998/99 and 1999/2000) on the recommendation, excluding provision for a return. • The Government chose not to increase fares beyond CPI for a period of three years. • The Government contract and actual funding of Metro is as follows: <table> <tr> <td>1997/98</td><td>\$18,300,000</td></tr> <tr> <td>1998/99</td><td>\$18,300,000</td></tr> <tr> <td>1999/00</td><td>\$18,550,000</td></tr> <tr> <td>2000/01</td><td>under negotiation, yet to be finalised.</td></tr> </table> <p>(Note: It is intended to negotiate a contract that includes provision for an adequate return. Negotiations for a contract for the years 2000/01 and beyond will be finalised during the course of this financial year.)</p> 	1997/98	\$18,300,000	1998/99	\$18,300,000	1999/00	\$18,550,000	2000/01	under negotiation, yet to be finalised.
1997/98	\$18,300,000								
1998/99	\$18,300,000								
1999/00	\$18,550,000								
2000/01	under negotiation, yet to be finalised.								
B: The Commission recommends that Government consider an agreement with the MTT for the amounts of Government contribution to be paid for services for each of the three years of prices oversight, subject to a pre-determined basis for adjustment.	<ul style="list-style-type: none"> • The Government and Metro have entered into an agreement for three years of the prices oversight review in the form of a contract. Contract negotiations for 2000/01 and onwards will be completed in the year ended 30 June 2000. 								
C. The Commission recommends that adult fares should be set according to the following principles: <ul style="list-style-type: none"> i) Fares should increase overall as the existing level of cost recovery from users of Metro services cannot be justified in economic terms. ii) The fares for 11-15 sections of travel should be 2½ to 3 times that for 1-2 sections, with appropriate intermediate gradations of fares for other section groupings. 	<ul style="list-style-type: none"> • The Government opted to retain the fares and structure that existed in February 1997. The Government chose not to increase fares beyond CPI adjustments over the full period of the prices oversight review (3 years) and legislated for this through a parliamentary order. 								

iii) <i>Section boundaries should be adjusted to obtain a better relationship between the number of sections and distance travelled.</i> iv) <i>Fare adjustments should be small and regular (ie annual).</i>	
D. <i>The Commission considers that the MTT should develop a set of performance measures for periodic reporting of quality of service. These measures should include reliability of service, and standards for condition and cleanliness of buses and route infrastructure.</i>	<ul style="list-style-type: none"> • Metro has introduced a Customer Service Charter, which describes a number of standards in regards to reliability of services, standards for condition of buses and route infrastructure. Those standards have been encapsulated into the contract with Government and therefore are binding. This recommendation has been implemented.

5.4 METRO TICKETING SYSTEM

Metro operates the electronic 'Crouzet' ticketing system (Metrofare) in Hobart and Launceston, commissioned in 1988, and the 'Wayfarer' system in Burnie, commissioned in 1995. The systems consist of an on-vehicle electronic ticket issuing machine which is connected to a remote magnetic card validator. The electronic ticket issuing machine is used to issue tickets to cash fare paying passengers and to record non-fare paying passengers. The magnetic ticket validator is used to process prepaid multi-journey and cash sale magnetic tickets. The transactions information received by the on-vehicle units is transferred to depot readers at the end of each driving shift.

It is important to recognise that the existing systems have been customised to meet the ticket issuing, ticket validation and management information requirements associated with Metro's existing fare structure. As such, any significant changes to the Metro fare structure may necessitate the major re-engineering or possibly replacement of the existing ticketing systems.

Consideration of a replacement ticket system for introduction in about 2003 has commenced. Detailed analysis of appropriate systems and technology will occur in the 2001/02 financial year. Advances in ticketing technology indicate that it will most likely be appropriate to replace the existing magnetic stripe fare medium by contactless smartcards when the ticketing system is replaced.

5.5 PRIVATE OPERATOR FARE COMPARISONS

The GPOC 1997 Fares Investigation Report made comparisons between Metro's fares and private operator fares on a sample of routes in the three regions. The general conclusion was that *"...particularly for longer routes, Metro fares are set below the level that would apply in a private operation."*

It was found that, for seven of the eight examples studied, private operator fares range from 6% to 36% higher than the Metro fare for the equivalent distance.

Since 1997, these differences between private operator and Metro fares will generally have widened, as private operator fares have increased since then.

These fare differences have now assumed greater importance, given the Government's policy of moving towards equal treatment of Metro and private operators.

5.5.1 PRIVATE OPERATOR STUDENT SERVICES IN METRO CONTRACT AREAS

One issue which has had an adverse impact on Metro's patronage, over the last few years in particular, has been the 'poaching' of students travelling in Metro's operating area by private operators. Because of the 'fare top-up' arrangements for carriage of school children by private operators, these operators have tended to extend their routes coming from outside the Metro areas to directly serve schools within the areas, instead of transferring students to Metro services. This practice is good for the private operators concerned, as their incremental revenue would generally exceed their incremental costs; may be good for the students who no longer have to transfer; but is generally bad for Metro, which loses the fare revenue but is generally not able to reduce costs; and is certainly bad for Government, which has to pay higher top-up subsidies to the private operator and most likely higher CSO payments to Metro.

While this practice has been going on for some time, since the repeal of the MT Act 1954 and the corporatisation of Metro, Metro has had no veto rights and no real protection from the practice. Metro recommends that the issue be highlighted and addressed as part of the passenger transport reform reviews and the new contracting system, including the establishment of a consistent funding basis for Metro and private operators.

5.6 INTERSTATE FARE AND COST RECOVERY COMPARISONS

Appendix C presents comparisons of Metro's fare levels and cost recovery performance with interstate capital city bus operators.

In regard to **fare levels**, the main conclusion is that Metro's fares are among the lowest of all operators examined. This conclusion applies to average fares overall, average adult fares, and adult fares for different distances. Since the early 1990s, Metro's fare increases have been lower (and less frequent) than for most other operators examined.

In regard to **cost recovery** (essentially the ratio of non-Government revenues to total operating costs), Metro was 'mid-range' in 1998/99:

- Metro's overall cost recovery was about 30%, with the figure for Hobart being 31%, Launceston 30% and Burnie 27%.
- Two operators examined (Sydney Buses, Brisbane Transport) had cost recovery ratios of around 50%.
- Most other operators had cost recovery rates in the range 22-30%, including Newcastle (22%), Canberra (23%), Adelaide (23-30%, depending on definition) and Perth (29%).

5.7 EVIDENCE ON FARES ELASTICITIES

Appendix C3 presents evidence on fare elasticities likely to be appropriate for Metro's services (fare elasticity represents the 'sensitivity' of patronage to fare changes). The main conclusions drawn there in the Metro context are as follows:

- Overall fare elasticities for the three centres would be expected to be about 0.3 to 0.4 in the short run (ie within 3-6 months), increasing to around 0.5 in the medium run.
- Peak period elasticities would be around two-thirds of these averages, off-peak elasticities up to 50% higher than these averages.

- Elasticities for adult concession groups would be up to 50% higher than these averages, with elasticities for other groups being lower than the average.
- Elasticities will be higher than the average for shorter distance trips (up to 2-3 kms), lower for medium/longer trips.

5.8 PROPOSED FARE POLICY PRINCIPLES AND DIRECTIONS

Metro's initial Submission to the 1996/97 GPOC Fares Review incorporated a review of pricing principles appropriate to Metro's services, including appraisal of issues relating to fare structure and fare levels. That review is not represented here, but remains applicable.

The following sections briefly summarise the relevant arguments relating to various aspects of the future fares system, ie:

- Fare structure (Section 5.9)
- Fare levels (Section 5.10)
- Fare concessions (Section 5.11)
- Fare and ticket types (Section 5.12)
- Fare adjustment issues (Section 5.13).

5.9 FARE STRUCTURES

The Metro submission to the GPOC 1996/97 review incorporated a qualitative review of the merits of each of the alternative fare structures relative to the distance-based sectional fares adopted by Metro, specifically flat fares and zonal fares. The key findings of this review are summarised below.

The strength of **flat fares** lies with their simplicity, minimum ticket issuing costs and the minimisation of fraud opportunities (i.e. no scope for over-riding). On the other hand, a flat fare structure is at odds with key commercial pricing principles. Most importantly, there is no relationship between the fares and the costs of service provision (i.e. cross-subsidisation is implicit in a flat fare structure, with those making short trips subsidising those making longer trips). Given this key deficiency, Metro concluded that the introduction of a flat fare structure did not warrant serious consideration.

The key arguments identified that potentially supported the adoption of a **zonal fare structure** (i.e. 'concentric rings' or 'neighbourhood zones') were as follows:

- A zonal structure may be easier for staff, customers and potential customers to understand; and
- A zonal structure facilitates straight-forward transfers between services.

However, it was concluded that both arguments carry limited weight in the Metro context.

Firstly, previous market research has established that only around 1 in 4 persons surveyed have expressed difficulties in understanding the existing Metro fare structure. Further, given that the bulk of these persons are either irregular or non-users, it is far from clear that any movement to a simpler zonal structure would be reflected in increased patronage and farebox revenue.

Secondly, the requirement to transfer between Metro services is relatively limited, and alternative methods have been developed to address this issue within the existing structure.

Given this, Metro considers that a distance-related sectional fare structure should be retained for the foreseeable future. However, it sees merits in adjusting the fare relativities between trips of different lengths within this structure: in this regard Metro supports the Commission's previous recommendation (Table 5.2) to modify fare relativities between different numbers of sections. This will also assist in moving Metro's fare v distance structure closer to that of Tasmanian private operators.

5.10 FARE LEVELS

The overall level of Metro fares needs to be considered in the context of an appropriate level of farebox cost recovery, having regard to CSO policy and funding issues and prescribed Government policies.

However, in this context it is worth noting the following points:

- Metro's fares are generally low relative to Tasmanian private operators: given the Government's passenger transport reform policies, it would seem appropriate to move towards greater standardisation of fares across the two sectors (although this does not necessarily imply that a single fare scale has to be adopted on all routes).
- Metro's fares are among the lowest of all interstate bus operators examined.
- The evidence indicates that fare elasticities likely to be applicable to Metro are around (-)0.5 in the medium term, perhaps somewhat higher than previously assumed. Further, fare elasticities for adult concession passengers are likely to be significantly higher than this, perhaps up to (-)0.7 to 0.8 in the medium term.
- The implications of these fare elasticities and current cost recovery performance is that the revenue-raising impact of any fare increases is likely to be rather modest. For example, a 10% across-the board (real) fare increase would be expected to result in:
 - a loss in patronage (in the medium term) in the order of 5%, but higher for adult concession passengers, and lower for full adult passengers.
 - a consequent increase in fare revenue of around 5%, or some \$350,000-\$400,000 per annum.

5.11 FARES AND TICKET TYPES

A number of different fare types can be applied within any fundamental fare structure. Examples are:

- Single fare
 - any time
 - peak/off-peak
- Day return
 - any time
 - off peak
- Period passes
 - daily
 - daily off-peak
 - weekly
 - monthly
- 'Stored ride'
 - 10-trip.

Many of these fare types are included in Metro's current product range.

It should be noted that the current ticketing system which supports the existing Metro product range has very limited flexibility to accommodate innovation in the development of additional ticket products. However, it would be expected that any future ticketing system introduced by Metro will have the capacity to allow the introduction of new ticket products consistent with market requirements. Hence a more fundamental review of fare and ticket types would seem appropriate at the time when a replacement of the current ticketing system is being contemplated. Analysis will occur in the financial year 2000/01 with a view to introducing a new system subsequently.

However, at this time Metro puts forward one proposal regarding changes in ticket conditions for the Commission's consideration, relating to Day Rover (full fare) and Day Tripper (concession) tickets. At present use of these tickets is restricted to 'off-peak' periods, defined as 9.00 am – 4.30 pm and after 6.00 pm on weekdays, plus all day on Saturday, Sunday and Public Holidays. Metro proposes that the restriction on use of these tickets in the weekday 4.30 pm – 6.00 pm period be eliminated.

The main benefits of this proposal are seen as:

- Passenger benefits, through reduced inconvenience.
- Operational benefits, through spreading of PM peak loadings and through avoiding driver/passenger conflict.

A more detailed analyses of this proposal is given in Appendix D.

5.12 FARE CONCESSIONS

The range of concession fares provided by Metro is entirely a matter of Government policy. However, it is important that the provision of these fares is supported by appropriate reimbursement arrangements to reflect the 'revenue foregone' by Metro.

In considering any changes in concession fares, it should be noted that elasticities for adult concession groups in particular are relatively high (refer Section 5.10), and hence any revenue gain from fare increases is likely to be very modest.

5.13 FARE ADJUSTMENT ISSUES

Following the 1997 GPOC review, it was indicated by Government that any increase in Metro's fares should be limited to changes in the Tasmanian CPI (All Groups) using 30 June 1997 base. In practice, the CPI increases over the period have been very small, and thus no fare increase has been practicable.

In order to illustrate this the following is provided:

- The All Groups CPI Index for Hobart was 121.3 in the June quarter 1997 and had increased to 124.0 by December 1999 (an increase of 2.23%).
- Advice received from the Solicitor-General with respect to the rounding of fares to the nearest ten cents was that each individual fare is constrained by the maximum percentage fare increase defined by the GPOC Order.

In view of these circumstances, an increase in fares from the completion of the 1997 investigation up to December 1999 has been considered by Metro to be not commercially practicable.

This CPI basis for fare increases is unsatisfactory, in Metro's view. It does not relate to movements in Metro's costs, nor is it consistent with the approach adopted for private bus fares in Tasmania. Movements in private bus fares are linked to the Tasmanian School Bus Index, which is a reasonable reflection of changes in industry costs. By way of example, the cost of fuel in the current year increased from budgeted costs by 13.5 cents per litre at the time this submission was prepared. This amount is not fully reflected in the CPI figures and as such cannot be adequately passed on in a fare adjustment. Fuel represents the largest recurrent operating expense for Metro outside wages.

Metro recommends that its fares should in future be adjusted on a similar basis as the private sector.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 COST EFFICIENCIES

- Metro has achieved benchmark costs that are significantly better than those of any other publicly-owned bus operator that participated in a cost efficiency evaluation for the financial year 1998/99.
- There remains a significant cost efficiency gap between Metro and the efficiently operated private bus companies benchmarked for the financial year 1998/99. Whilst further productivity and efficiency gains are achievable, there will always remain a significant gap in the absence of head-to-head competition due to award conditions and unit rate differences inherent between public and private employees.
- The Commission should ensure that benchmark efficiency targets recommended are realistic and take into consideration Government policy on competition.

6.2 FARES ASPECTS

- Fare increases should be linked to an appropriate index. Metro considers that the index utilised by the Government for the private bus industry better reflects actual circumstances impacting bus operations. As such, this index should be the basis of future applications for fare increases in the same manner as for private bus operators.
- In 1997 the Commission recommended that:

"The fare for 11-15 sections of travel should be 2 1/2 to 3 times that for 1-2 sections, with appropriate intermediate gradations of fares for other section groupings,

Section boundaries should be adjusted to obtain a better relationship between the number of sections and distance travelled; and

Fare adjustments should be small and regular (ie annual)."

Metro recommends that these earlier recommendations should be introduced. The fare adjustments referred to should be aligned to the appropriate indexation (as above).

- Metro recommends that the Commission endorse a proposal for the afternoon peak (Monday to Friday) restrictions on the Day Tripper and Day Rover tickets to be eliminated whilst retaining the morning peak restrictions. In such circumstances prices could be adjusted as provided in Section 5.11 (Appendix D).

- Metro recommends that, in developing its recommendations on fares, the Commission should take into consideration the social impacts of any fares increase. The majority of Metro users are from low income or welfare recipients' households. Significant increases will have detrimental impacts on those people and will serve to drive them into other forms of transport or alternatively restrict their mobility altogether. In such circumstances demand for services will decline and pressure to reduce or remove poorly utilised services will increase, which if successful will result in deterioration of services and in further patronage losses.
- Metro recommends that the existing section-based fare structure should be retained but with the fare scale by number of sections adjusted as noted earlier (Section 5.9).
- As a consequence of the Federal Government's New Tax System (including GST), Metro's costs will increase by about 4.7% from July 2000, while purchase costs for private motor vehicles will decline significantly. If Metro's cost increase is translated into a corresponding fare increase (as allowed for within ACCC pricing guidelines), then significant additional patronage loss would be expected. The Commission should take note of these circumstances in determining maximum fares in respect of the social impacts on households requiring Metro services and the implications for demand.

6.3 PATRONAGE PROSPECTS

- The Commission should note that ongoing patronage decline remains the most significant and pressing issue impacting on Metro. The Commission should also note that the declines experienced by Metro are consistent with those experienced throughout Australia; however issues mitigating against public transport in Tasmanian cities are more relevant (lack of congestion, private vehicle parking capacity and private vehicle parking pricing).
- Metro has focused its efforts heavily in attempting to slow and ultimately halt the rate of decline. This has been difficult to achieve particularly in an environment where the economy of the State in recent years has performed relatively poorly in comparison to other states. It is important to also note that unemployment has been relatively high and the Tasmanian population is in decline.

The patronage declines in 1996/97 were large due to the nature and extent of the fares increase at that time. Subsequent years have disclosed a rate of decline that is less than 1996/97, however remaining relatively high. The current year to date trends appear to indicate a slight improvement. The likely reason for that improvement is a continuation of Metro's efforts and an improving state economy.

- Metro originally planned for the decline to be halted by the end of the financial year 2000/01. Year-to-date performance in 1999/2000 would indicate that the target was achievable, however the impending GST introduction now makes the target unrealistic. Metro will amend its planning to achieve its stated aim of halting the decline in the year 2003/04.

APPENDIX A : DATABASE OF METRO STATISTICS

Table A1 provides key aggregate annual statistics for Metro for the years 1989/90 – 1998/99 (inclusive).

Financial statistics are given in real (1998/99) dollars, using the Tasmanian CPI as the factor.

TABLE A1 : METRO STATISTICS, 1989/99 - 1998/99

	1998-99	1997-98	1996-97	1995-96	1994-95	1993-94	1992-93	1991-92	1990-91	1989-90
Statewide										
Patronage (000's)										
Fare paid boardings	8072	8459	9123	9967	10077	10663	10567	10950	12118	12503
Free school boardings	1496	1537	1516	1591	1693	1069	1391	1209		
Total Patronage	9568	9996	10639	11558	11770	11732	11958	12159	12118	12503
Total Kilometres	10374	10339	10822	10933	11068	10582	10592	10398	9321	9416
Passenger per km	0.92	0.97	0.98	1.06	1.06	1.11	1.13	1.17	1.30	1.33
Cost to Government	18300	18324	19335	20727	19305	20067	19392	19561	18813	17326
<i>real terms</i>	14939	15020	15940	17187	16486	17853	17726	18281	17748	17326
Free school travel introduced during 1990-91										
Deficit before Abnormals	17865	18188	19259	22268	19975	19326	18499	19430	18268	17233
<i>real terms</i>	14584	14908	15877	18464	17058	17194	16910	18159	17234	17233
Before Government funding of free school travel										
Deficit before interest Income and all Government Funds including for student transport										
	18516	20362	21182	23842	22775	23057	22742	23797	21745	20036
<i>real terms</i>	15115	16690	17462	19769	19449	20513	20788	22240	20514	20036
Ave Fares revenue per boarding - excluding any notional revenue from free travel										
	0.82	0.80	0.79	0.68	0.68	0.64	0.66	0.66	0.67	0.64
<i>real terms</i>	0.67	0.66	0.65	0.56	0.58	0.57	0.60	0.62	0.63	0.64
Ave Fares revenue per boarding - excluding free travel boardings										
	0.97	0.95	0.92	0.79	0.79	0.71	0.74	0.74	0.67	0.64
<i>real terms</i>	0.79	0.78	0.76	0.65	0.67	0.63	0.68	0.69	0.63	0.64
Operating Expenditure (excluding Abnormals) per km										
	2.62	2.82	2.81	2.98	2.85	2.94	2.95	3.10	3.24	3.01
<i>real terms</i>	2.14	2.31	2.32	2.47	2.44	2.62	2.70	2.90	3.06	3.01
Ownership Costs as a proportion of total expenditure (excluding Abnormals)										
	12.8	13.9	16.0	17.5	18.5	18.6	17.7	17.2	17.0	16.4
Subsidy per trip (excluding Abnormals and Government funding of student transport)										
	1.87	1.82	1.81	1.93	1.70	1.65	1.55	1.60	1.51	1.38
<i>real terms</i>	1.52	1.49	1.49	1.60	1.45	1.47	1.41	1.49	1.42	1.38
Subsidy per trip (excluding Abnormals, interest income and Government funding of student transport)										
	1.94	2.04	1.99	2.06	1.94	1.97	1.90	1.96	1.79	1.60
<i>real terms</i>	1.58	1.67	1.64	1.71	1.65	1.75	1.74	1.83	1.69	1.60

APPENDIX B : SERVICES AND OPERATIONS

B1. SCOPE OF OPERATIONS

Metro provides urban passenger bus services as defined in its contract with Government.

The areas of operation in Hobart, Launceston and Burnie are as follows:

- **Hobart:** within a 22 kilometre radius of the Hobart General Post Office;
- **Launceston:** within a 12 kilometre radius of the principal post office; and
- **Burnie:** services throughout the Municipality of Burnie and between Burnie, Wynyard and Ulverstone.

These operations include the provision of school services in each of these centres and a range of charter services, including school charter services to customers in urban and 'near-urban' areas in Tasmania.

In aggregate, services in the three centres cover 10.4 million bus kilometres annually and provide about 9.6 million passenger trips.

B2. SERVICE LEVELS

Hobart

Metro operates some 1,600 scheduled trips in Hobart per day, including 'Busy Bee', Doorstopper, Shopper Shuttle and Metro Express services. In general, operation on these routes Monday to Friday commences after 6.30am and finishes by 10.30pm. On most routes, services run later on Fridays to around 12 midnight. On Saturdays, services commence operation at around 7.30am, and most routes cease operating by 12.10am. Sunday and Public Holiday services are not provided on some routes; whilst on others, services start at 9.00am or later and finish by 8.00pm.

Launceston

Metro operates some 550 scheduled trips in Launceston per day including 'Busy Bee' and Shopper Stopper services. In general, operation on these routes Monday to Friday commences after 7.00 am and finishes by 6.00 or 7.00pm. On four routes, services run later on Fridays to around 10.30pm. On Saturdays, inbound services commence operation at around 8.30am (outbound at around 9.00am). Most routes cease operating by 7.00pm but three routes continue operating until around 10.30pm. Sunday and Public Holiday services are not provided on some routes; whilst on others services start at 10.00 am or later and finish by 4.00pm.

Burnie

In Burnie, Wynyard and Ulverstone and their surrounding areas, Metro operates some 180 scheduled trips per day. These generally operate between the hours of 7.30am and 6.00pm on week-days only.

B3. SERVICE QUALITY STANDARDS

The Metro Customer Service Charter (issued in July 1997) requires that Metro work towards the achievement of the following standards of service. The performance is measured by independent assessment and published in local regional newspapers:

- 98% of buses will depart and arrive no more than three (3) minutes after the time specified on timetables.
- No bus will depart ahead of the scheduled time.
- All buses will travel on the scheduled route and stop, when timetabled to do so, at all stops where there are passengers waiting and hailing.
- Metro will always provide all the information it has and explain why services have not run as timetabled.
- Metro will provide whatever assistance it can to customers affected.
- All buses will be cleaned daily.
- All buses will have clear and accurate destinations and route numbers.
- All Metro staff will be helpful, friendly and pleasant to customers.
- Information about services, fares and timetables will be readily available to customers from Metro offices, Metro Shop, at all major bus malls.
- Over the next 4 years, timetables and fare information for that route will progressively be provided at each bus stop.
- All drivers will have information about services, fares and timetables, or means of obtaining that information, for all customers who require it.
- Over the next 4 years, Metro will examine how it can locate its bus stops at or near well-lit areas.
- Over the next 5 years, all bus termini will be lit at night time and all bus stops where a bus shelter exists will be in a well lit area.
- Subject to local council agreements, over the next 2 years, all bus malls will be monitored by video surveillance.
- Over the next 2 years, all bus termini will be equipped with shelters or seats.
- Over the next 4 years, all bus stops, where more than 40 people regularly wait for buses over the course of the travelling day, will be equipped with adequate shelter or seating.
- Full information about the ticketing system and how to use it will be provided at all places where tickets can be purchased.
- Metro staff will provide helpful assistance for customers who are unsure of how the ticketing system works or who have difficulty in using it.
- Metro will listen to, consider and respond within 10 working days, to all comments, suggestions and complaints from its customers.

APPENDIX C : FARES ASPECTS

C1. INTERSTATE FARE COMPARISONS

Table C1 provides a comparison of adult bus fares in Australian capital cities as at January 2000 for trips (without transfers) over distances ranging from 2 kilometres to 25 kilometres. The table shows that:

- **Single Cash Tickets:** across all distances, Tasmanian fares are amongst the lowest, with only Darwin having lower fares for distance greater than 5 kilometres.
- **Multi-Ride (10 trip) Tickets:** Across all distances, Tasmanian multi-ride (10 trip) fares were amongst the lowest, with only Darwin (and Adelaide for longer trips) being lower for distances greater than 5 kilometres.

TABLE C1: ADULT BUS FARE COMPARISONS – JANUARY 2000⁽¹⁾⁽²⁾

Distance	Sydney	Brisbane	Canberra	Melbourne	Tasmania	Adelaide	Perth	Darwin
Single Cash Tickets								
2 kms	\$1.30	\$1.40	\$2.00	\$2.30	\$1.20	\$1.50	\$1.00	\$1.20
5 kms	\$2.30	\$2.20	\$2.00	\$2.30	\$1.60	\$2.80	\$1.70	\$1.20
10 kms	\$2.90	\$2.80	\$2.00	\$2.30	\$1.90	\$2.80	\$2.50	\$1.60
25 kms	\$4.00	\$3.20	\$4.00	\$5.30	\$2.80	\$2.80	\$4.00	\$2.10
Multi-ride (10 trip) Tickets								
2 kms	\$9.50	\$11.20	\$17.00	\$19.50	\$9.60	\$10.20	\$8.50	\$9.60
5 kms	\$16.00	\$17.60	\$17.00	\$19.50	\$12.80	\$19.00	\$14.45	\$9.60
10 kms	\$20.00	\$22.40	\$17.00	\$19.50	\$15.20	\$19.00	\$21.25	\$12.80
25 kms	\$34.00	\$25.60	\$34.00	\$47.30	\$21.60	\$19.00	\$34.00	\$16.80

Source: Prepared by Booz Allen & Hamilton

Notes:

- (1) Some of the fare systems are section-based, allowing only one vehicle boarding on a cash ticket; other systems are zonal, allowing multiple boardings within a time limit (generally 2 hours)
- (2) Melbourne, Adelaide and Perth fares levels are for all public transport modes

It is important to recognise that data such as that presented in Table C1 cannot, on its own, provide a complete picture of relative fares in each of the States. In particular, a more comprehensive comparison needs to take account of factors including:

- the different conditions of validity of tickets in different cities (eg. the capacity to make transfers on a single ticket);
- the range of ticket types available in each city and associated ticket purchasing patterns; and
- differences in trip lengths and transfer patterns between systems.

To provide additional information, Table C2 presents published estimates of the average fare per boarding for major Australian capital city public transport operators for the period 1992/93 to 1996/97. The table shows that average Metro fares have consistently been amongst the lowest across all these centres over the entire period.

Table C2: Australian Public Transport Average Fare Per Boarding: Industry Commission							
City	Operator	Mode	Average Fare Per Boarding (\$/Bd) ⁽¹⁾				
			1992/93	1993/94	1994/95	1995/96	1996/97
Sydney	State Transit	Bus	\$1.20	\$1.20	\$1.20	\$1.30	\$1.40
Newcastle	State Transit	Bus and Ferry	\$1.40	\$1.60	\$1.30	\$1.30	\$1.50
Brisbane	Brisbane Transport	Bus and Ferry	\$0.99	\$0.99	\$0.98	\$1.04	n.p.
Adelaide	TransAdelaide	Bus	\$1.04	\$1.02	\$1.04	n.p.	n.p.
Perth	MetroBus	Bus	\$0.83	\$1.18	\$0.68 (2)	\$1.27	\$0.64 (2)
Tasmania	Metro	Bus	\$0.77	\$0.73	\$0.83	\$0.83	\$0.93
Canberra	ACTION	Bus	\$0.70	\$0.74	\$0.77	\$0.89	\$0.98

Source: 'Government Trading Enterprises Performance Indicators 1992/93 – 1996/97', Industry Commission (1998)

Notes: (1) Inclusive of Adult and Concession Markets

(2) Figures appear to be in error.

TABLE C3 : AUSTRALIAN PUBLIC TRANSPORT AVERAGE FARE PER BOARDING – METRO/BAH ESTIMATES									
City	Operator	Mode	Average Fare per Boarding - \$ ⁽¹⁾						
			92/93	93/94	94/95	95/96	96/97	97/98	98/99
Newcastle	State Transit	Bus/Ferry	0.50	0.50	0.49	0.48	0.49	0.50	0.49
Brisbane	Brisbane Transport	Bus	1.05	1.08	1.16	1.16	1.34	1.31	1.26
Adelaide	TransAdelaide & other	All	0.67	0.66	0.67	0.70	0.76	0.77	0.83
Perth	Transperth	All	0.58	0.64	0.72	0.72	0.75	0.81	0.85
Canberra	ACTION	Bus	0.68	0.72	0.76	0.85	0.99	0.97	1.01
Darwin	Darwin Bus	Bus		0.76	0.73	0.83	0.86	0.89	1.05
Hobart	Metro	Bus	0.69	0.68	0.66	0.70	0.77	0.81	0.77
Launceston	Metro	Bus	0.71	0.67	0.66	0.67	0.78	0.78	0.76
Burnie	Metro	Bus	0.58	0.54	0.57	0.62	0.66	0.67	0.67
Total	Metro	Bus	0.69	0.67	0.66	0.69	0.76	0.80	0.77

Source: Data assembled by BAH for Metro, from relevant operators.

Notes: (1) Data is total farebox revenue divided by total boardings (including transfers).

Table C3 shows other, arguably more consistent, estimates of average fares per boarding for a number of Australian cities. This indicates that:

- With the exception of Newcastle, Metro average fares are (based on 1998/99 statistics) the lowest of all these cities.
- The rate of increase in Metro fares since 1992/93 has been slower than that in most other cities: since 1992/93, average fares in Adelaide, Perth and Canberra have all overtaken Metro's average fares.

Table C4 shows the most recent (1998/99) data available on average fares per adult (non-concession) boarding: these figures avoid the difficulties in comparisons associated with differences between cities in concession fare policies. It is evident that Metro average adult fares are the lowest of all these cities.

TABLE C4: AVERAGE ADULT FARE COMPARISONS, AUSTRALIA, 1998/99			
City	Operator	Average Fare per Boarding (\$)	Notes
Sydney	State Transit	1.47	Based on 1998/99 STA Sydney bus data
Newcastle	State Transit	1.62	Based on 1998/99 STA Newcastle bus only data
Brisbane	Brisbane Transport	1.88	Based on 1998/99 Brisbane Transport bus only Ticketing Data
Canberra	ACTION	1.95	Based on July/August/September 1999 data
Perth	Various	1.53	Advice from Transperth/WA DoT. Bus services only.
Hobart	Metro	1.28	} Metro/BAH figures
Launceston	Metro	1.38	
Burnie	Metro	1.29	
All	Metro	1.30	

C2. INTERSTATE COST RECOVERY COMPARISONS

Comparisons between operators on levels of cost recovery are very difficult to make for several reasons:

- measures of cost recovery are very sensitive to the way in which revenues and operating costs are defined;
- possible variability of accounting conventions between operators also adds to the difficulty of making comparisons; and
- cost recovery levels reflect underlying differences in the costs of service provision and farebox revenue profiles between operators. These would produce various results regardless of differences in data between operators.

As a result of all these factors, extreme care needs to be taken when making cost recovery comparisons between Australian public transport providers.

Table C5 sets out estimates of farebox cost recovery for Australian Government public transport authorities for years 1992/93-1996/97 as reported in Industry Commission (1998). Cost recovery is defined here as (essentially) the proportion of total expenditure met from non-Government sources (ie fares and other commercial revenues). These estimates show that cost recovery performance can essentially be categorised according to three bands (i.e. 'low', 'mid-range' and 'high').

- Low: Perth, Adelaide (c.24%)
- Mid-range: Canberra, Newcastle, Brisbane and Tasmania (42% to 44%)
- High: Sydney (59% bus).

An alternative, and arguably more comparable, set of cost recovery estimates for Australian bus operators in the main capital cities for years since 1994/95 is presented in Table C6.. These estimates have been compiled from a number of published and unpublished sources. The main conclusions from these estimates are as follows:

- Focusing on bus services, cost recovery levels fall into two broad groups ('high' and 'low').

Table C5: Australian Public Operator Cost Recovery Proportions: Industry Commission Estimates

City	Operator	Mode	Cost Recovery Proportions (%) ⁽¹⁾				
			1992/93	1993/94	1994/95	1995/96	1996/97
Sydney	State Transit	Bus	48.1	47.8	47.3	57.7	58.7
		Ferry	47.8	57.6	61.1	58.8	62.7
Newcastle	State Transit	Bus and Ferry	34.5	32.5	41.4	45.6	42.6
Brisbane	Brisbane Transport	Bus and Ferry	45.6	46.9	53.8	45.7	n.p.
Adelaide	TransAdelaide	Bus	25.9	25.5	23.7	n.p.	n.p.
		Train	19	18	12	n.p.	n.p.
		Tram	21	28	30	n.p.	n.p.
Perth	MetroBus	All	15.9	16.1	18.1	n.p.	23.9
Tasmania	Metro	Bus	37.9	41.8	38.9	42.7	43.7
Canberra	ACTION	Bus	30.3	34.7	43.4	43.9	41.7

Source: 'Government Trading Enterprises Performance Indicators 1992/93-1996/97', Industry Commission (1998)

Notes:

- (1) Cost Recovery Proportion is defined as (1-Government Operating Subsidy) where: Government Operating Subsidy = Total Revenue from Government*100/Total Expenditure;
Total Revenue includes revenue from sales and levies, asset sales, investment income, receipts from Government for agreed services (e.g. CSOs), receipts from Government to cover deficits on operations and abnormal revenue.
Excludes funds received for specific capital works from Governments and other parties and equity contributions from Government; Total expenditure includes salaries, wages, purchases, interest, material losses from sales of non-current assets, depreciation and abnormal expenses.

n.p.: Not Provided

Table C6 : Australian Public Operator Cost Recovery Proportions: Various Estimates

City	Operator	Mode	Cost Recovery Proportions (%)				
			1994/95	1995/96	1996/97	1997/98	1998/99
Sydney/ Newcastle	State Transit	All (2)	61.6	62.2	58.8	55.8 (f)	56.8 (f)
		All (3)					53.0 (f)
		Sydney Bus (1)		58.5	58.3	56.6	
		Sydney Bus (3)					57.5 (f)
		Sydney Ferry (1)		54.1	55.5	53.0	
		Sydney Ferry (3)					53.6 (f)
		Newcastle Bus/ Ferry(1)		23.0	21.5	22.2	
		Newcastle Bus/ Ferry(3)					22.1(f)
Brisbane	Brisbane Transport (4)	Bus and Ferry	47.3	50.2	52.1	?	?
Canberra	ACTION (5)	Bus	24.0	23.4	24.2	24.7	22.7
Perth	Various	All(6)					26.4
		Bus (6)					29.3
Adelaide	TransAdelaide & others	Bus(7)				22.8/29.9	
Tasmania:							
Hobart	Metro(8)						30.8
Launceston	Metro(8)						29.6
Burnie	Metro(8)						26.5
All	Metro(8)						30.3

Notes: Metro

- (1) State Transit 1996/97 and 1997/98 Annual Reports; where Farebox Cost Recovery = Passenger Farebox Revenue/Total Expenditure.
(2) IPART Report No. 2 (1998); where Accrual Cost Recovery = All-non Government revenue (plus dividend) / accrual expenses; (f): forecast.
(3) IPART Report No. 2 (1998); where Cost Recovery is based on accrual cost recovery from passenger farebox revenue; (f): forecast.
(4) Personal communication with Brisbane Transport; where Cost Recovery is defined as the ratio of direct revenue (farebox plus miscellaneous revenue) to operating costs (revenue excludes concession fare reimbursement).
(5): ACTION's Bus Fares for 2000/2001-Draft Price Direction; where cost recovery = farebox revenue / operating expenses.
(6) Personal communication with Transperth/WA DoT. Revenues are all non-Government income; costs include capital charges and coordination costs.
(7) Personal communication with PTB SA. Two figures given: higher figure is recovery of recurrent costs only; lower figures includes long-run asset replacement costs (depreciation/interest).
(8) Derived from Australian Bus Benchmarking Assessment 1998/99.

- The 'high' group comprises Sydney Buses (57-58%) and Brisbane Transport (52% in 1996/97, later data not available).
- The 'low' group comprises five cities with cost recoveries in the range 22%-31%: Newcastle (22%), Canberra (23%), Adelaide (30% on recurrent expenditures, 23% with full replacement capital allowance), Perth (29%) and Tasmania (average 30%).
- Metro Tasmania has an overall cost recovery (1998/99) of 30.3%: figures for the individual centres are Hobart 30.8%, Launceston 29.6% and Burnie 26.5%

C3. EVIDENCE ON FARE ELASTICITIES

Both Australian and international evidence suggests that the fare elasticity for urban bus services in the short run is in the order of (minus) 0.3, ie relatively inelastic. (A price elasticity of -0.3 implies that a 10% increase in fares will result in a 3% reduction in patronage). Further, fare elasticities are found to be generally similar between different cities and countries.

Table C7 summarises international evidence on (short-run) elasticities for urban bus services, as drawn together in State Transit (NSW) (1996). The table shows that:

- the short-run elasticities reported by Goodwin (ie. 0.21, 0.28 and 0.37) are broadly consistent with the often quoted elasticity of 0.3 for urban public transport;
- the estimates reported by Luk/Hepburn all lie between 0.27 and 0.35, with the exception of the Melbourne estimate for Government buses; and
- the study completed by Hensher for the NSW Independent Pricing and Regulatory Tribunal was consistent with a short-run price elasticity of demand for Sydney Buses services of around 0.2.

TABLE C7: URBAN BUS PRICE ELASTICITIES - SUMMARY OF SELECTED STUDIES

Source/City/Time Period	Average Elasticity
Goodwin – International (1992)	
• c. 6 months	0.21
• explicit short-run (0-6 months)	0.28
• 0-12 months	0.37
Luk/Hepburn - Australia	
• Australia	0.29
• Melbourne govt bus	0.11
• Melbourne private bus	0.35
• Adelaide	0.37
• Adelaide	0.27
• Capital Cities	0.30
Hensher – Sydney (1995)	0.2 (approx)

Notes: Negative signs omitted for clarity. Long-run elasticities would be expected to be between 1.5 and 3.0 times reported short-run elasticities.

Source: State Transit (1996).

A recent BAH project to review international fare elasticity evidence, with a focus on values applicable in Australian/New Zealand conditions, concluded that:

- Long-run (c.4+ years) elasticities are around twice short-run (3-6 months) elasticities. This difference appears to be particularly valid for the peak (for which responses re residential location, employment location etc may occur over several years), but may be lower for the off-peak.
- Peak period elasticities are around half off-peak elasticities.

- Elasticities tend to be higher than average for shorter trips (say up to 2-3 kms, where walking /cycling is a strong alternative) and for longer (15km+ trips).
- There is some evidence that elasticities are higher in smaller cities, although this is not very conclusive.
- For medium-size centres in Australia/New Zealand (such as those served by Metro) typical short -run elasticities would be around 0.3, with medium/long-run elasticities as high as 0.5 to 0.6. Also peak elasticities would be around half off-peak elasticities.

BAH's recent work for Metro ('Demand Forecast' project) included econometric time-series analyses of annual patronage trends for Metro and various other Australian 'medium-size' centres. It found that:

- For all centres combined, the average medium-run fare elasticities were (minus) 0.37, 0.48 and 0.53 for the three main models developed.
- While separate elasticity estimates were derived for each of the three Metro centres, these were not clearly statistically significantly different from these all-centre average figures.

These most recent analyses are very consistent with the other evidence noted above. In the context of this review of Metro fares, our main conclusions are as follows:

- Overall fare elasticities for the three centres would be expected to be about 0.3 to 0.4 in the short run (ie within 3-6 months), increasing to around 0.5 in the medium run.
- Peak period elasticities would be around two-thirds of these averages, off-peak elasticities up to 50% higher than these averages.
- Elasticities for adult concession groups would be up to 50% higher than these averages, with elasticities for other groups being lower than the averages.
- Elasticities will be higher than the averages for shorter-distance trips (up to 2-3 kms), lower for medium/longer trips.

APPENDIX D : PROPOSALS FOR CHANGES IN DAY ROVER/ DAY TRIPPER TICKET VALIDITY

D1 OVERVIEW

This appendix presents details of Metro proposals and analysis relating to extensions of the period of validity of Day Rover and Day Tripper tickets.

The Day Tripper (concession) and Day Rover (full fare) tickets' usage is currently restricted to off peak periods. Off peak travel is between 9:00 am and 4:30 pm and after 6:00 pm on Mondays to Friday, all day Saturday, Sunday and Public Holidays. It is proposed that the restriction on these tickets for between 4:30 pm and 6:00 pm, Monday to Friday, be eliminated.

Four (4) ticket types are involved in off peak travel:

Day Tripper Daily	\$ 1.90	Adult Concession/Child/Student
Day Tripper 10 Day	\$15.20	Adult Concession/Child/Student
Day Rover Daily	\$ 3.10	Adult
Day Rover 10 Day	\$24.00	Adult

These tickets allow unlimited travel/boardings for any one days' usage.

D2 PASSENGER BENEFITS

Generally, there are two types of benefits for passengers: not being inconvenienced by having to avoid boarding a bus during the restricted afternoon period; and, converting from a higher priced single trip ticket to a daily/multi trip ticket.

The 4:30 pm cut off for the off peak period results in off peak ticket users, especially adult concession and adult users, rushing for the last bus before 4:30 pm. If they make it, they may still have desired to catch a slightly later bus. Not boarding before 4:30 pm means paying a single trip fare and perhaps wasting the multi boarding benefit of their previously purchased daily ticket, or having to wait until 6:00 pm for the off peak period to resume.

Single trip ticket users during the afternoon peak period may be able to convert to a cheaper Tripper or Rover ticket, depending on whether or not they are making a second trip in the period after 9:00 am. Adult Concession passengers and single trip ticket users are more likely to benefit than Adult and Child/Student passengers and multi trip ticket users, since the former are less likely to need to travel before 9:00 am than the latter. The analysis below may in fact overstate the degree to which Child/Student passengers and Adult multi trip ticket users especially convert to the cheaper daily/multi trip tickets.

A significant group of users of Metro services is Adult Concession passengers. This group is being especially targeted for future growth in patronage. Removal of the afternoon peak restriction on Day Tripper tickets would significantly increase the convenience of these tickets, thereby increasing patronage.

D3 OPERATIONAL BENEFITS

Similarly, there are two main operational benefits from eliminating the afternoon peak restrictions on daily tickets: avoiding passenger/driver conflict as to whether the time is before or after 4:30 pm; and spreading the broader afternoon peak period passenger load.

Passenger/driver conflict regarding the end of the restricted period at 9:00 am is rare since single trip ticket users don't have their tickets then and they are generally on the way out from home. The 4:30 pm return to the restricted period is just the opposite, resulting in drivers having to frequently enforce the daily ticket limitations. To a lesser degree the 6:00 pm changeover also results in passenger/driver conflict. The elimination of these conflicts facing drivers and their supervisory/support staff would benefit the operation of Metro's bus services.

The 4:30 pm beginning of no off peak ticket usage results in a concentration of boardings for the last services before 4:30 pm which can impact back to the school student boardings peak period commencing around 3:00 pm. Another mini peak occurs just after 5:00 pm. Anecdotal evidence, the decrease in Adult patronage for many years and the maintenance of the same level of afternoon peak services all suggest that there is adequate capacity on existing services to handle an influx of boardings due to daily ticket users choosing to travel after 4:30 pm. Such a spreading of the overall afternoon peak would take pressure off services running before 4:30 pm thus offering operational benefits.

D4 REVENUE IMPACTS

Allowing the conversion from single trip tickets to multi trip tickets from 4:30 pm to 6:00 pm is estimated to result in a revenue loss of \$55,000 per year for Hobart. This estimate is based on 1998/99 patronage, mid 1997 desegregation of ticket types between time periods and Saturday distribution between tickets types as a proxy for conversion from single to multi trip tickets. As noted above, the assumed rates of conversion for some ticket types may be too high, resulting in an overstatement of the potential revenue loss.

D5 FARE CHANGE TO MAINTAIN REVENUE

In order to make the elimination of the off peak restriction revenue neutral, only minimal changes are required to the existing fare structure. This is largely due to the high volume of Day Tripper Daily ticket usage and the requirement that fares be rounded to the nearest \$0.10. In precise terms this ticket need only be increased by \$0.06, with the remaining \$0.04 generating enough revenue to hold down the other tickets' increases. The two Daily tickets would need to increase by only the minimum amount, i.e., \$0.10.

The following revised fares

Day Tripper Daily	\$ 2.00	5.3%
Day Tripper 10 Day	\$15.70	3.3%
Day Rover Daily	\$ 3.20	3.2%
Day Rover 10 Day	\$24.80	3.3%

would actually result in a net increase in revenue of \$7,000.

Although a rise in fares will result in some loss of patronage, this would most likely be more than offset by increased bus usage due to the greater convenience of the daily/multi trip tickets. The above 10 Day ticket revised fares have been set so that their percentage increases are similar to that for the lowest minimum increase, i.e., for Day Rover Daily tickets. The differential in percentage changes between Daily and 10 Day Tripper tickets will result in some conversion to the 10 Day ticket thus lessening the projected increase in revenue.

This minimal fare change to maintain revenue indicates that it is likely that the elimination of the afternoon peak restriction on off peak tickets can be easily accommodated within a general fare restructuring.

APPENDIX E : PATRONAGE ANALYSES AND PROJECTIONS

E1. PAST METRO PATRONAGE TRENDS

Metro patronage trends over the period since 1985/86 have been analysed by centre and passenger type, as shown in Figures E1-E6. For these analyses 'patronage' has been taken as total boardings (including transfers) on all scheduled services (ie excluding charters). Brief commentary on key features of these results follows:

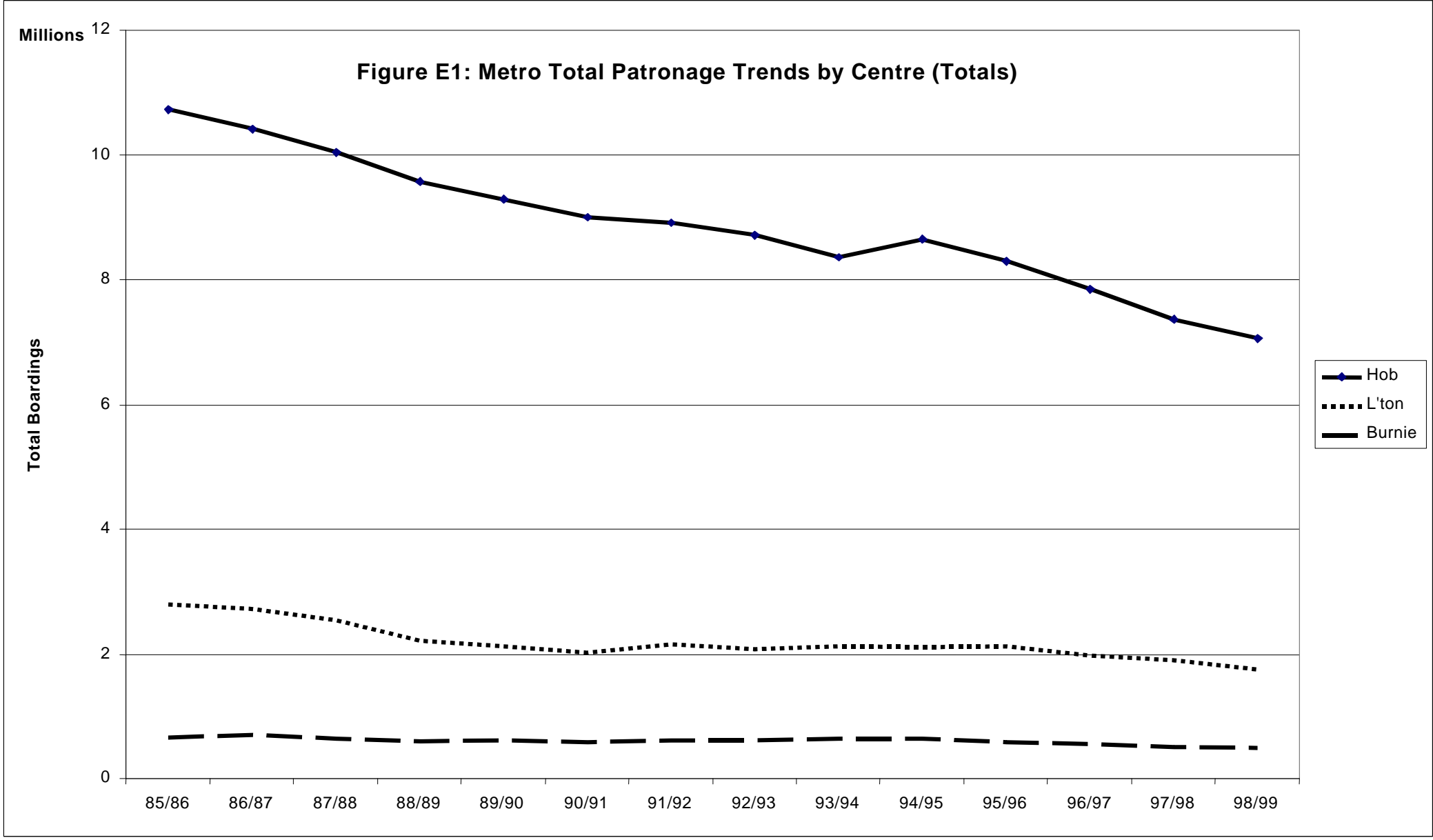
- Total patronage in all three centres has fallen over the 13 year period, although not uniformly (Figures E1, E2). For the three centres, 1998/99 patronage had fallen relative to 1985/86 patronage by 34% (3.2% pa) in Hobart, 38% (3.4% pa) in Launceston, 26% (2.3% pa) in Burnie.
- Over the three years since 1995/96, patronage has fallen quite sharply in all three centres – by 5.2% pa in Hobart, 6.3% pa in Launceston, 5.7% pa in Burnie.
- Full adult patronage has fallen most rapidly over the period (Figure E4), with an overall fall of 57.5% over 13 years (6.4% pa).
- Child/student patronage has fallen 25% on average (2.2% pa), but with virtually all this fall since 1994/95. Adult concession patronage has fallen 24% (average 2.1% pa), but has increased substantially since 1992/93 (in parallel with the rapid fall in full adult patronage).
- As a proportion of total patronage, full adults have fallen over 10 years from 35% (1988/89) to 20% (1998/99) – Figure E5. Total adult patronage (including adult concession patronage) has fallen less markedly, from 62% in 1985/86 to 57% in 1998/99. Since 1992/93 the proportion of total adults has been increasing and children/students decreasing.
- The services have been getting steadily emptier over the period as measured by the passenger boardings/bus kilometre ratio (Figure E6). These ratios have fallen by 37% in Hobart, 46% in Launceston and 30% in Burnie. The trends in these ratios reflect that, over the 13 year period, total bus kilometres in each centre has increased by around 10% while patronage levels have been falling, as just described.

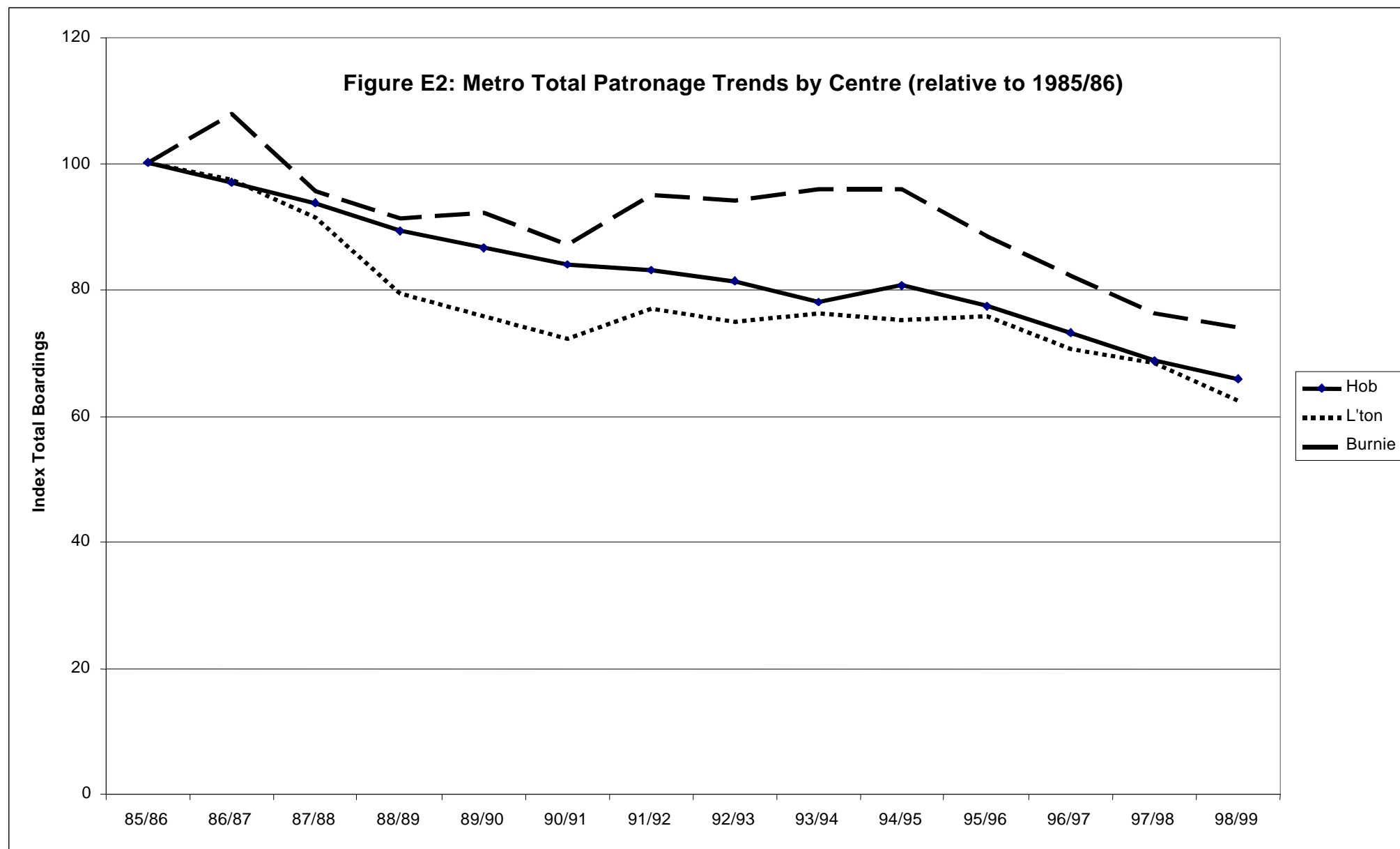
E2 CURRENT METRO PATRONAGE ANALYSES

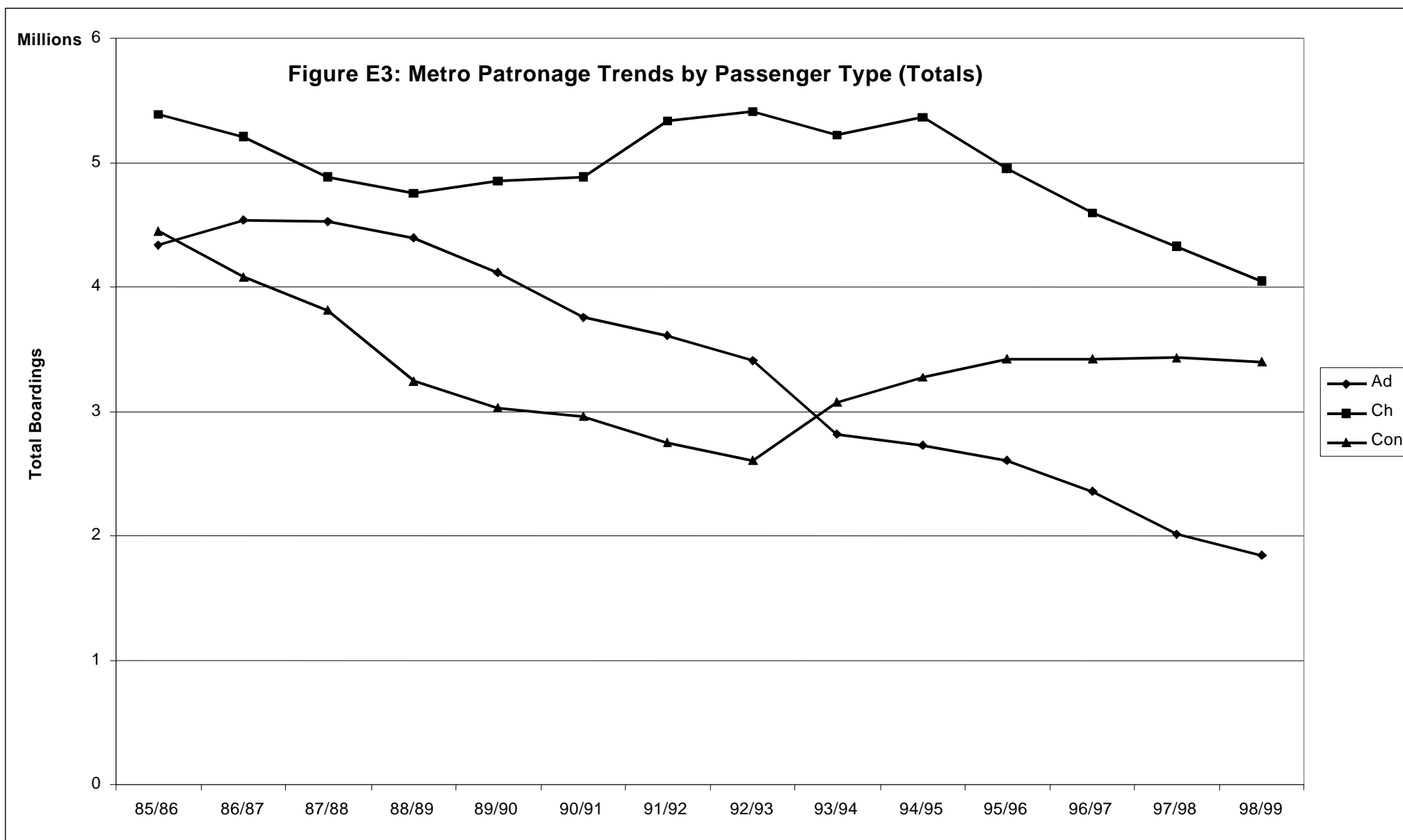
E2.1 1998/99 Patronage by Ticket Type

Table E1 presents a breakdown of 1998/99 patronage for each centre by ticket type and numbers of sections. Key features of this data include:

- In Hobart, the dominant adult ticket sales are for 1-2 sections (closely followed by 3-4 sections), in Launceston for 3-4 sections and in Burnie for 1-2 sections.
- In Hobart and Launceston, only a very small proportion of adult passengers travel more than 7 sections; in Burnie there is a larger proportion of longer trips, although these are still only a modest proportion of total boardings.
- For Adult Concession travellers, the Day Tripper ticket is dominant, while for Children/Students the Metro-10 ticket is dominant.







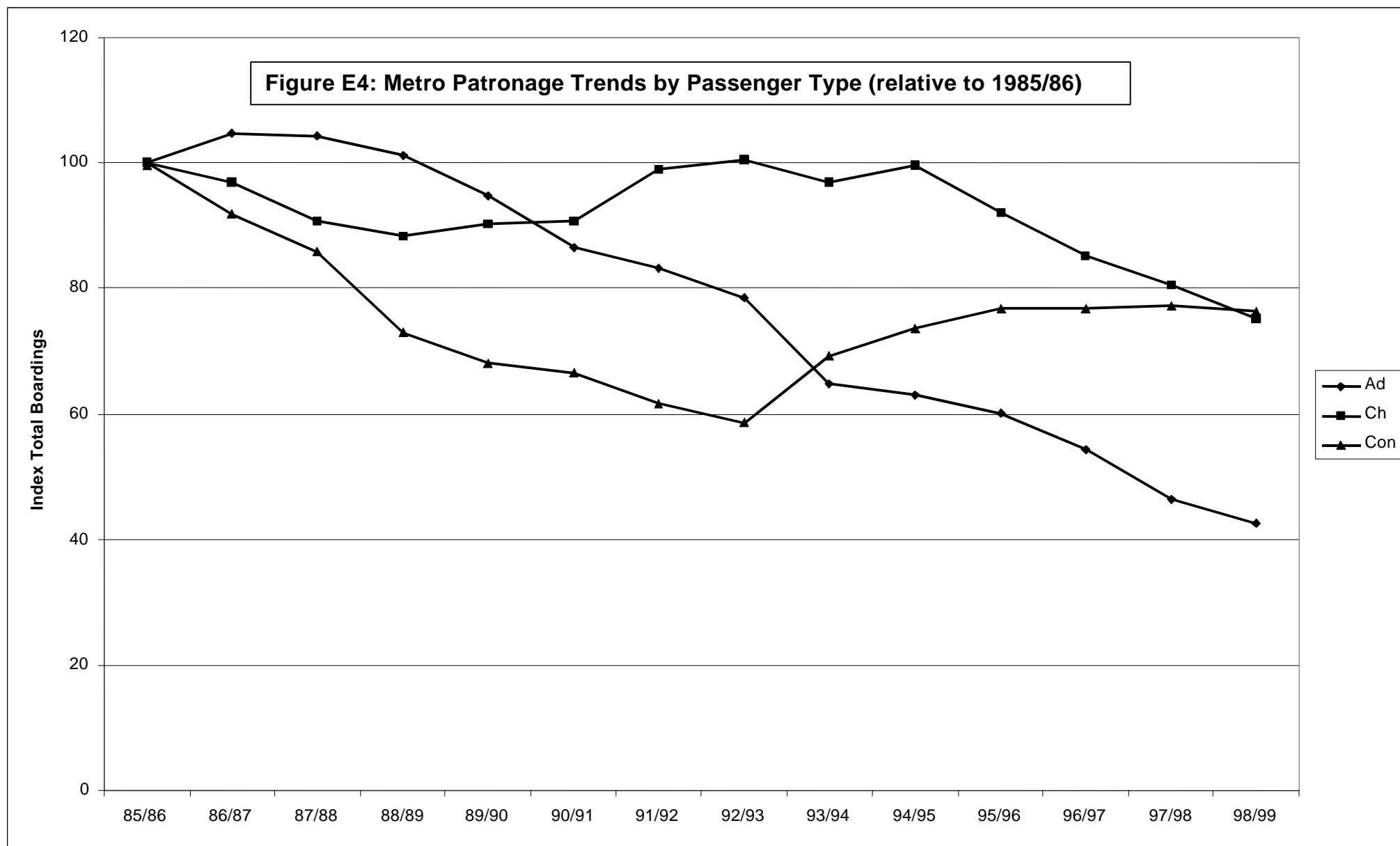
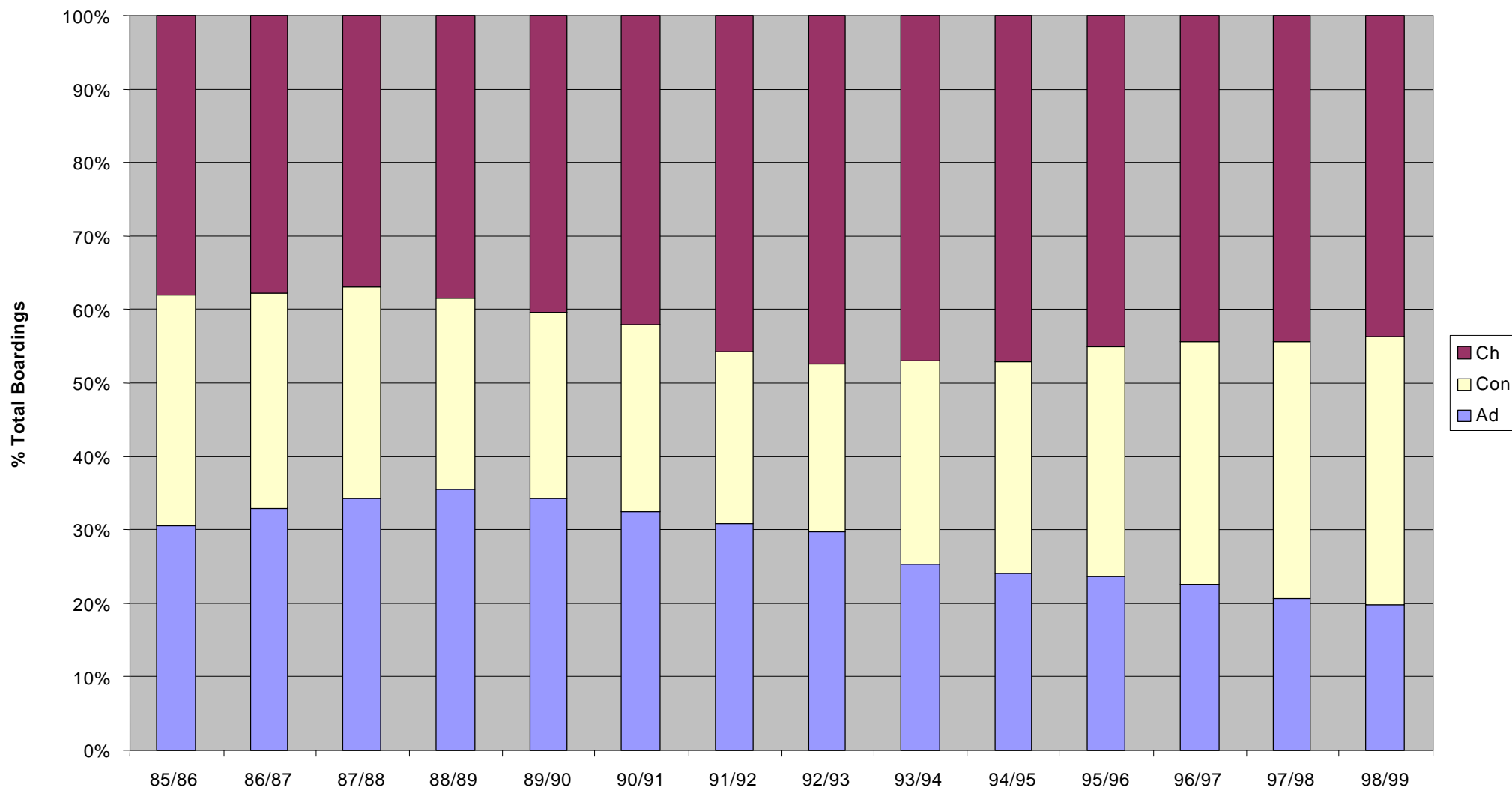


Figure E5: Metro Total Boardings by Passenger Type (Proportions)



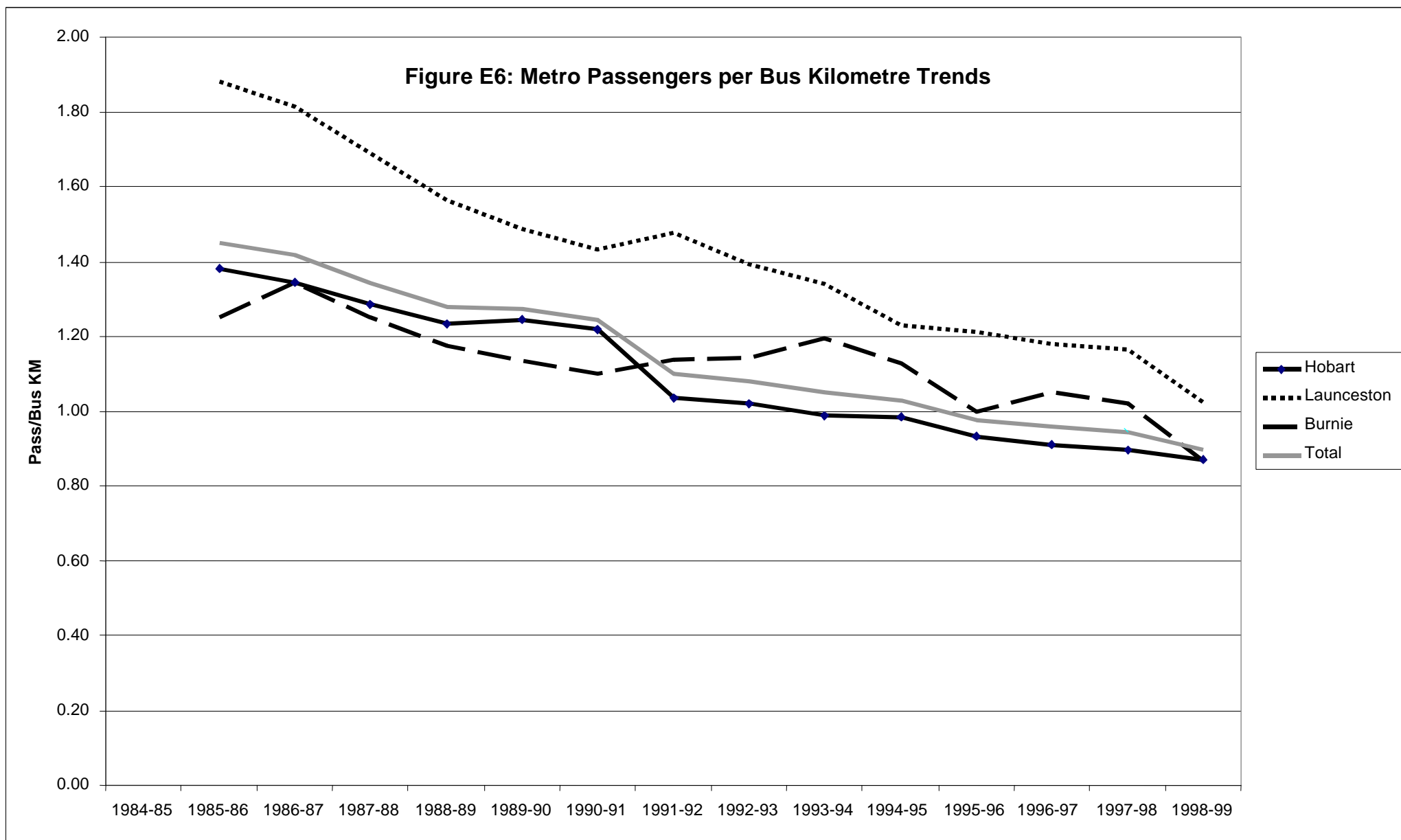


TABLE E1: METRO PATRONAGE BY TICKET TYPE, 1998/99				
HOBART				
Ticket Type	Fare	Tickets Sold	Fare Rev \$	Tot Boardings
ADULT (FULL)				
1-2 SEC	1.20	388,106	465,728	392,453
3-4 SEC	1.60	257,733	412,373	277,754
5-7 SEC	1.90	152,542	289,830	180,990
8-10 SEC	2.10	30,705	64,481	37,431
11-15 SEC	2.80	2,428	6,798	3,040
1-2 M.10	9.60	10,897	104,612	119,274
3-4 M.10	12.80	18,247	233,556	203,945
5-7 M.10	15.20	13,901	211,303	171,589
8-10 M.10	16.80	2,792	46,907	34,503
11-15 M.10	21.60	325	7,012	3,643
DAY ROVER	3.10	27,783	86,128	76,242
ROV. 10 DAY	24.00	229	5,493	7,236
Sub-Total			1,934,219	1,508,100
ADULT CONCESSION				
AD.CON	1.20	465,259	558,311	609,081
AD.CON M.10	9.60	32,316	310,238	431,407
DAY TRIP	1.90	499,356	948,776	1,323,329
TRIP M.10	15.20	4,924	74,844	149,662
SEN.DAY	2.10	62,838	131,959	192,191
SEN M.10	18.00	0		
FAMILY	9.00	162	1,456	848
Sub-Total			2,025,584	2,706,518
CHILD/STUDENT				
CH/SCH	1.20	537,721	645,265	712,284
CH/SCH M.10	9.60	60,430	580,127	769,387
CH/SCH Mth	38.40	2,859	109,767	164,859
FREE				955,275
Sub-Total			1,335,160	2,601,805
TERTIARY				
TERT M.10	10.00	12,334	123,335	172,836
TERT Mth	40.00	1,152	46,081	65,805
Sub-Total			169,416	238,641
TOTAL		2,585,038	5,464,379	7,055,064

LAUNCESTON				
Ticket Type	Fare	Tickets Sold	Fare Rev \$	Tot Boardings
ADULT (FULL)				
1-2 SEC	1.20	61,534	73,841	62,854
3-4 SEC	1.60	97,054	155,286	101,015
5-7 SEC	1.90	24,003	45,606	28,714
8-10 SEC	2.10	736	1,546	1,230
11-15 SEC	2.80	106	296	249
1-2 M.10	9.60	1,070	10,268	10,560
3-4 M.10	12.80	2,503	32,034	26,053
5-7 M.10	15.20	507	7,712	5,468
8-10 M.10	16.80	21	352	310
11-15 M.10	21.60	0		18
DAY ROVER	3.10	5,888	18,252	13,562
ROV. 10 DAY	24.00	15	359	302
Sub-Total			345,551	250,335
ADULT CONCESSION				
AD.CON	1.20	140,297	168,356	167,392
AD.CON M.10	9.60	6,745	64,750	80,067
DAY TRIP	1.90	104,191	197,964	247,322
TRIP M.10	15.20	839	12,753	22,667
SEN.DAY	2.10	12,833	26,950	34,917
SEN M.10	18.00	0		
FAMILY	9.00	14	126	26
Sub-Total			470,898	552,391
CHILD/STUDENT				
CH/SCH	1.20	154,341	185,209	173,745
CH/SCH M.10	9.60	27,157	260,706	290,237
CH/SCH Mth	38.40	240	9,228	9,959
FREE			0	402,122
Sub-Total			455,142	876,063
TERTIARY				
TERT M.10	10.00	5,093	50,932	58,754
TERT Mth	40.00	36	1,436	1,769
Sub-Total			52,368	60,523
TOTAL		645,222	1,323,960	1,739,312

BURNIE				
Ticket Type	Fare	Tickets Sold	Fare Rev \$	Tot Boardings
ADULT (FULL)				
1-2 SEC	1.20	61,263	73,516	62,828
3-4 SEC	1.60	4,876	7,802	4,877
5-7 SEC	1.90	447	850	447
8-10 SEC	2.10	493	1,035	492
11-15 SEC	2.80	3,374	9,448	3,374
1-2 M.10	9.60	424	4,072	4,414
3-4 M.10	12.80	143	1,830	1,516
5-7 M.10	15.20	13	197	232
8-10 M.10	16.80	0	0	10
11-15 M.10	21.60	353	7,624	3,651
DAY ROVER	3.10	1,250	3,875	2,716
ROV. 10 DAY	24.00	1	24	139
Sub-Total			110,273	84,696
ADULT CONCESSION				
AD.CON	1.20	16,713	20,055	19,842
AD.CON M.10	9.60	2,291	21,993	27,184
DAY TRIP	1.90	34,431	65,419	75,605
TRIP M.10	15.20	41	622	1,481
SEN.DAY	2.10	1,108	2,327	2,660
SEN M.10	18.00	37	665	569
FAMILY	9.00	4	36	8
Sub-Total			111,117	127,349
CHILD/STUDENT				
CH/SCH	1.20	41,926	50,311	68,520
CH/SCH M.10	9.60	5,751	55,210	61,180
CH/SCH Mth	38.40	0		
FREE	0.00			139,051
Sub-Total			105,521	268,751
TERTIARY				
TERT M.10	10.00	143	1,430	1,599
TERT Mth	40.00	0		
Sub-Total			1,430	1,599
TOTAL		175,082	328,341	482,395

E2.2 1998/1999 Patronage By Passenger Type And Time Period

Metro passenger boardings for a representative week were analysed by passenger fare type and time period:

- Passenger types – adult, adult concession, school/child, tertiary student
- Time periods – weekday peaks/interpeak/evening, Saturday, Sunday and Public Holiday.

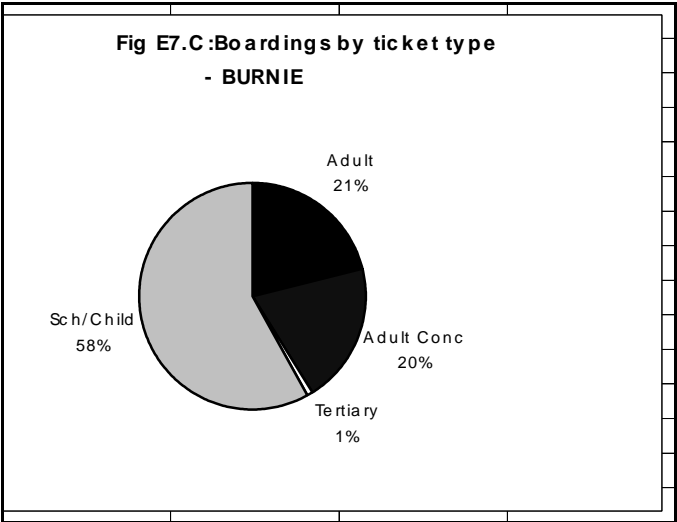
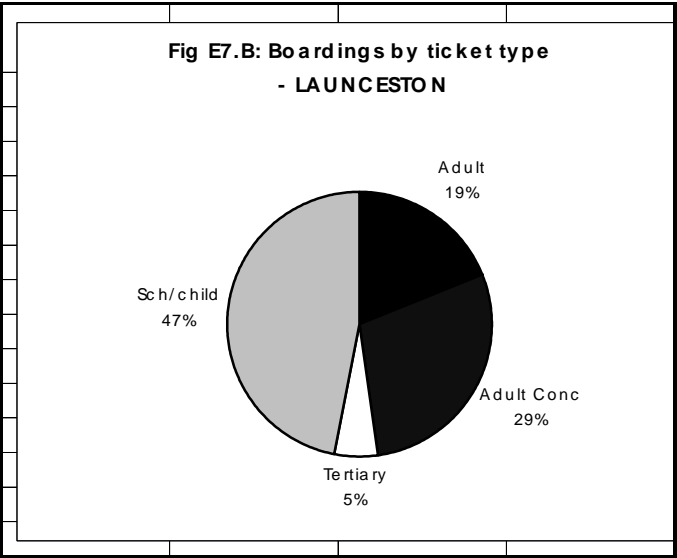
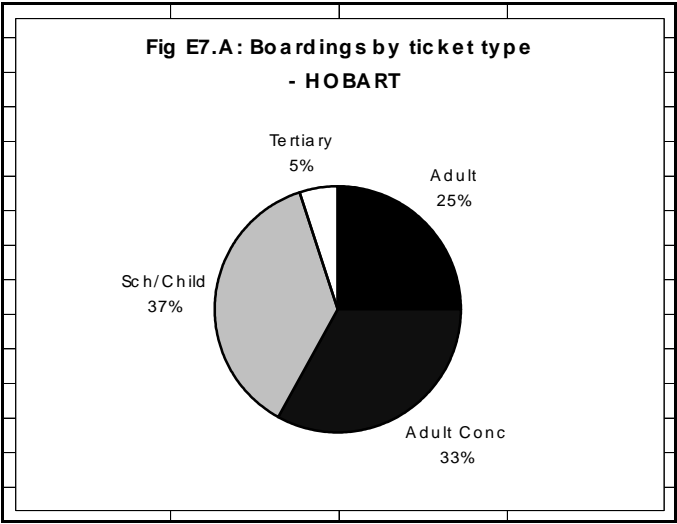
Passenger Type

The results by passenger type are summarised for the three centres in Figure E7. Brief comments follow.

Hobart: Metro services in Hobart are used primarily by people travelling on a concession fare (almost 75% of all boardings). This includes adults paying concession fares as well as children and students who travel on reduced fares or free. Full fare paying adults make up about one quarter of Metro's Hobart passengers in an average week. All school/child travel accounts for 37% of boardings while tertiary fares make up the final 5%.

Launceston: The most popular types of fares purchased in Launceston display a similar pattern to the fares purchased in Hobart. Again, concession travel makes up the bulk of travel made in an average week however, in Launceston's case, the percentage of adult passengers paying full fare (19%) is lower than for Hobart by about 6%. School/child travel in Launceston (47%) represents an increase of 10% against those made in Hobart 37%. The percentage of boardings made by tertiary students is about the same in both cities (5-6%).

Burnie: The Burnie market differs somewhat from the patterns seen in both Hobart and Launceston. In Burnie's case, school/child travel accounts for the highest percentage of boardings (58%). Concession fares also make up a large percentage of total boardings (20%) but are less significant than in either Hobart or Launceston. Full adult fares account for 21% of boardings, which is similar to Launceston and Hobart. In contrast to Hobart and Launceston, boardings made on tertiary tickets is negligible.



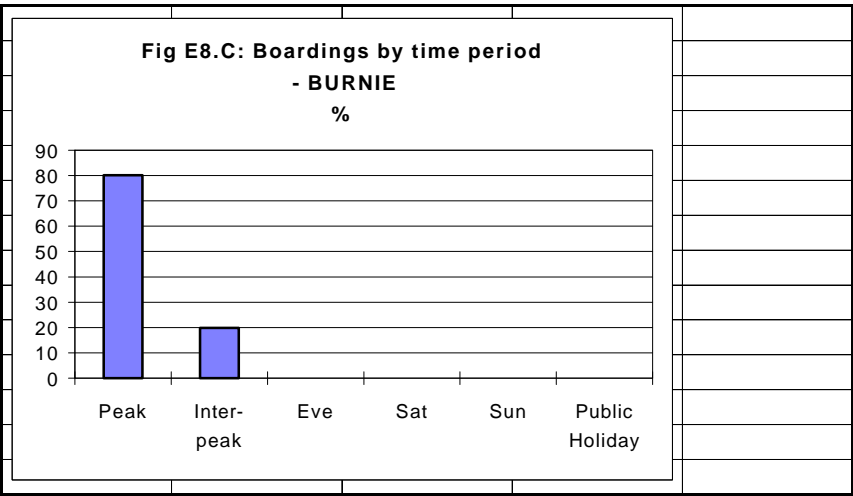
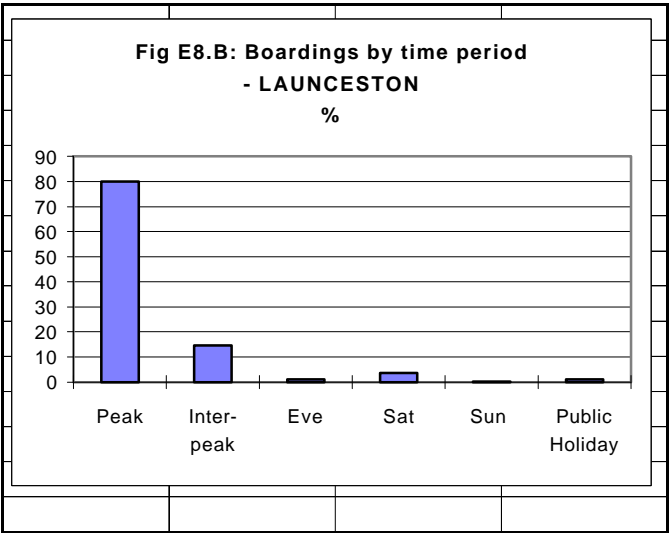
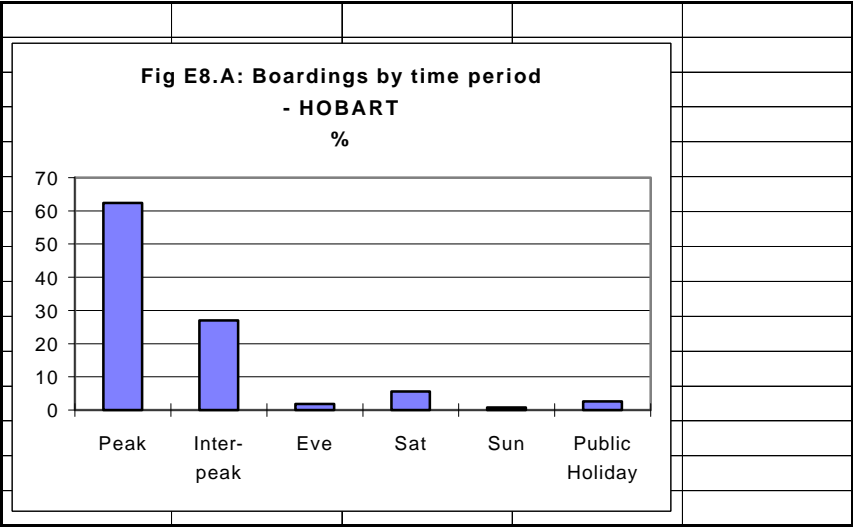
Time Period

The results by time period are summarised for the three centres in Figure E8. Brief comments follow.

Hobart: Almost two thirds of Hobart passengers travel during peak periods. Travel during inter-peak periods accounts for almost 30% of boardings made in an average week while hardly any journeys are made during the remaining time periods especially in the evenings, on Sundays and on Public Holidays.

Launceston: The pattern of boardings by time period in Launceston is similar to the pattern observed for Hobart. The majority of boardings are made in peak periods although in the case of Launceston the percentage is higher (80%) than in Hobart (62%). Boardings made during the inter-peak in Launceston are lower (about 15%) than in Hobart (27%) while boardings made during the remaining time periods differ only slightly to the figures for Hobart. In both cities the highest percentage of these remaining boardings is recorded on Saturday.

Burnie: Burnie displays a similar pattern of boardings by time period as the other two centres. The majority of journeys are made during the peak period (about 80% as is the case in Launceston) while about one fifth of boardings are made during the inter-peak period. This is lower than the figure for Hobart (27%) but greater than the figure for Launceston (15%). No services operate in Burnie in the evenings, on weekends or on public holidays.



E3 METRO PATRONAGE LEVELS RELATIVE TO INTERSTATE CITIES

E.3.1 Current Patronage Levels

Some comparisons have been made between Metro's 1998/99 patronage for each of the three centres with patronage levels for selected interstate cities. In each case patronage has been expressed as total boardings pa per catchment area population.

The results are given in the following three graphs of patronage/population against catchment population:

- Figure E9 – base (unadjusted) data
- Figure E10 – patronage levels adjusted for fare differences (based on estimated elasticities)
- Figure E11 – patronage further adjusted for differences in service levels and demographic characteristics (age distribution, car ownership levels).

The base data (Figure E9) indicates a strong linear relationship between patronage/head and population on a logarithmic scale. The adjustment for fare differences (Figure E10) improves the strength of this relationship. The further adjustments for service levels and demographic characteristics (Figure E11) further improve this relationship ($r^2 = 0.826$ as compared with $r^2 = 0.753$ for the base data).

On both the base data (Figure E9) and the fully adjusted data (Figure E11), Burnie patronage levels are marginally greater than indicated by the regression line, while Launceston and Hobart levels are marginally lower. However, firm conclusions cannot be readily drawn from this analysis: many factors will influence patronage differences between cities aside from the few factors incorporated in these analyses.

E3.2 Past Patronage Trends

Some analyses have been undertaken to compare trends in Metro's patronage levels over the period since 1985/86 with bus patronage trends in selected interstate cities. The key conclusions were:

- Average public transport trip rates (ie passenger boardings pa/person) have declined in all the cities examined over this period; although in some cities there have been slight increases since the early 1990s.
- The downward trends in trip rates in the three Metro centres are towards the middle of the range of the interstate centres.
- When trip rates in each centre are 'standardised', by adjusting for fare and service level changes over the period, the trends in the Metro centres are still within the range of the interstate centres, but towards the bottom end (ie with rates of patronage decline slightly worse than the average interstate trends).

Figure E.9 : Patronage/Capita vs Population - Actual

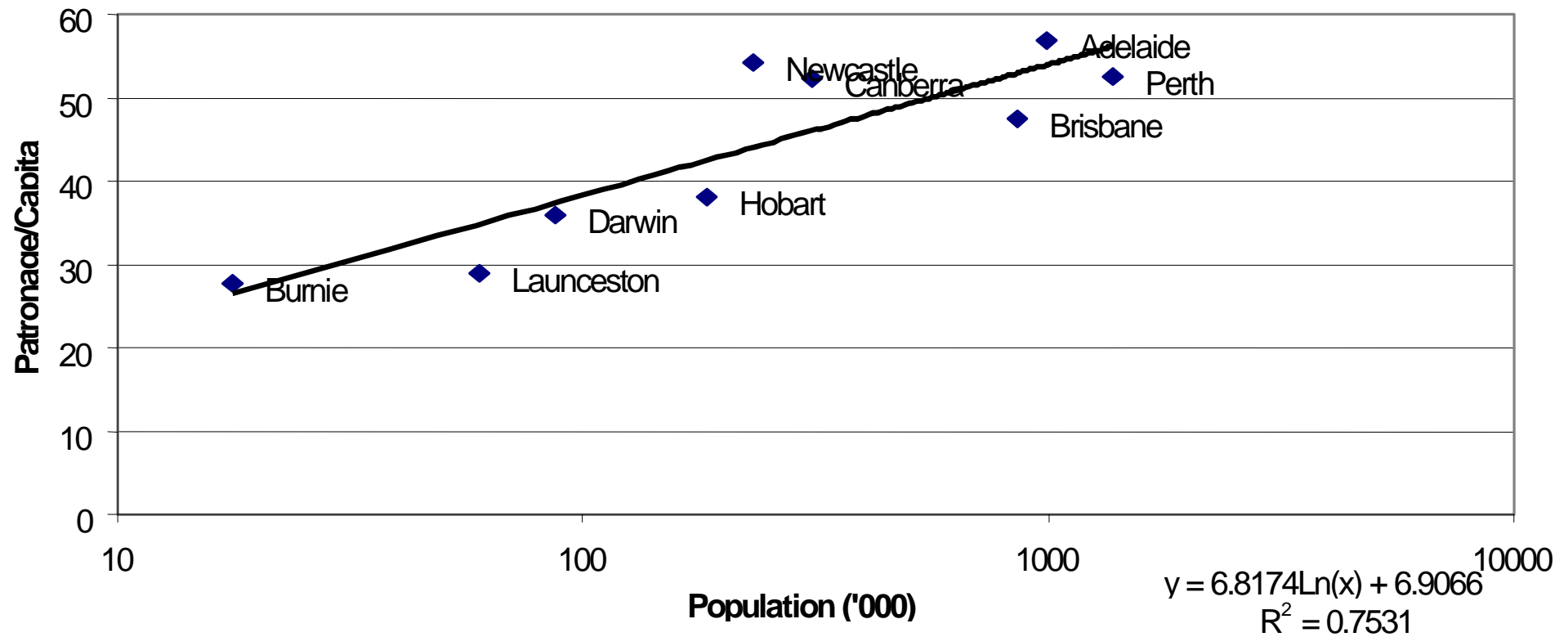


Figure E.10: Patronage/Capita vs Population - Adjusted (1)
Fares Only

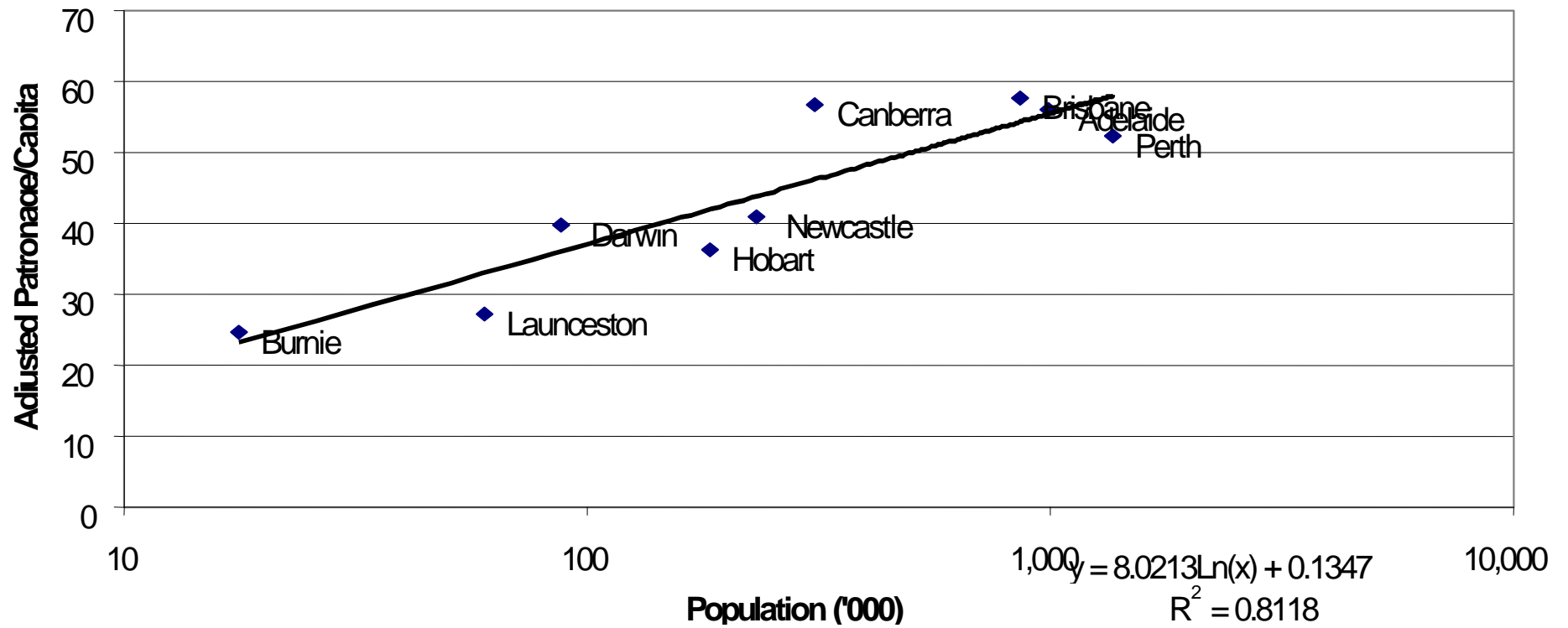
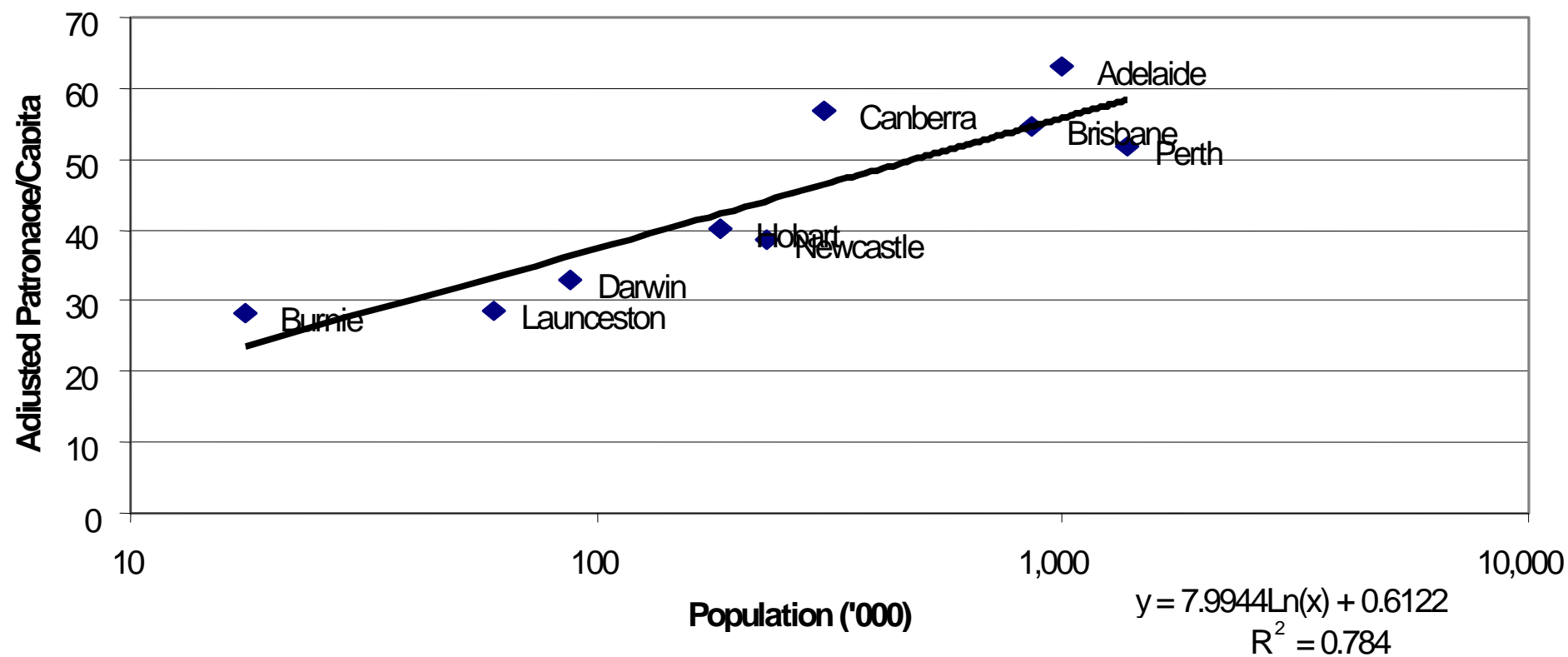


Figure E.11: : Patronage/Capita vs Population - Adjusted (2)
Fares and Demographic



E4. METRO PATRONAGE PROJECTIONS

E4.1 Overview

As part of the Metro 'Demand Forecast' project, BAH developed trend projections of 'base' patronage for each centre over the 15 year period 1999-2014. The base projections represent expected changes in patronage allowing for changes in:

- Total population
- Age distribution of population
- Employment levels
- Car ownership (% of zero car households)
- Other factors (related to time).

They assume no changes in fares (real terms) or service levels (or other service initiatives). They also assume no change in current transport and development policies.

The following provides a summary of these projections and their basis, in two parts:

- Forecasts of relevant demographic/economic variables
- Derivation of trends in patronage given these variables.

E4.2 Demographic/Economic Forecasts

Table E2 summarises the forecasts/projections of relevant demographic and economic variables for each centre for years 1999 (base), 2004, 2009 and 2014.

The sources of these forecasts/projections are as follows:

- Total population – ABS: special set of forecasts prepared for each year up to 2017, disaggregated by five-year age categories.
- Proportion of population under age 29 – ABS (as above).
- Employment – BAH, assuming that proportion of population over 19 in employment in each centre remains unchanged from 1998/99 average figures. (Proportion used for analysis is ratio of full-time employees + 0.5 * part-time employees to total population).
- Car ownership – BAH, estimate based on analysis of past trends in the proportion of zero car households and expected future trends (recognising that car ownership is moving towards saturation levels).

E4.3 Derivation of Patronage Projections

'Base' patronage projections for each centre were derived by applying demand 'elasticities' (as determined in the 'Demand Forecast project) to the changes in the demographic/economic variables.

The following demand 'elasticities' were applied:

- Elasticity for % age 0-29 1.47
- Elasticity for % in employment 0.76
- Elasticity for % zero car households 0.21
- Time trend (residual) -0.30% pa

E4.4 'Base' Patronage Projection Results

The right hand columns of Table E2 show the base patronage projections for each centre:

- The 'Trip Rate Factor' column shows the projected change in public transport trips/person.
- The 'Total Factor' column shows the projected change in total public transport trips in each areas, allowing for the population change.

Key features of these projections over the last 15 year period are as follows:

- Population is predicted to fall by 6% in Hobart, 9% in Launceston and 10% in Burnie.
- Average public transport trips/person are predicted to decline by about 20% as a result of the ageing of the population and trends in employment ; and by a further 7% - 10% as a result of increasing car ownership and other factors.
- Overall average public transport trips/person would reduce by 27% - 30% in the three centres; and total public transport trips reduce by 33% - 37%.

These projections for the average public transport trips/person to fall by 27% - 30% (approximately 2% pa) are sensibly consistent with experience over the last 15 years.

TABLE E2 : DEMOGRAPHIC/ECONOMIC AND PATRONAGE PROJECTIONS, 1999 - 2014								
Centre	Year	Total Pop	Population Factor	% < 29 years	% Employed	% 0 Car Households	Trip Rate Factor	Total Factor
Hobart	1999	184,637	100.0	42.0%	35.2%	12.8%	100.0	100.0
	2004	182,067	98.6	39.1%	36.4%	11.6%	89.0	87.7
	2009	178,118	96.5	36.9%	37.4%	10.3%	80.1	77.3
	2014	173,219	93.8	34.6%	38.3%	9.1%	71.0	66.6
Launceston	1999	60,072	100.0	43.0%	35.2%	14.9%	100.0	100.0
	2004	58,857	98.0	40.7%	36.0%	13.7%	90.9	89.1
	2009	57,047	95.0	38.5%	36.9%	12.4%	82.2	78.1
	2014	54,821	91.3	36.1%	37.8%	11.2%	73.1	66.7
Burnie	1999	17,515	100.0	42.9%	35.2%	12.4%	100.0	100.0
	2004	17,091	97.6	39.9%	36.2%	11.1%	88.5	86.4
	2009	16,491	94.2	37.5%	37.3%	9.9%	79.2	74.6
	2014	15,775	90.1	35.2%	38.2%	8.6%	70.2	63.2

APPENDIX F : MARKET APPRAISAL AND PROSPECTS

F1. OVERVIEW

This Appendix presents a summary of information on Metro's market and its positioning in the urban travel market – including market shares, user profile and attitudes and perceptions of users. It is largely taken from the recent Metro/BAH 'Demand Forecast' project ('Market Appraisal' Working Paper).

F2 MARKET SHARES

Table F1 provides a range of statistics relating to the proportion of total travel undertaken by bus/Metro, based on recent surveys together with Metro/BAH analyses.

Section A of the table indicates that Metro carried about 3.1% of all trips in Hobart, 2.3% in Launceston and 0.9% in Burnie.

Section B of the table estimates bus market shares by trip purpose:

- For work trips, bus market shares are significantly higher than for all purposes: the overall work mode shares are 7.3% in Hobart, 2.8% in Launceston and 1.9% in Burnie. It is notable that the bus mode share to CBD destinations is significantly higher than to other destinations (reflecting the better bus service levels to/from the CBD).
- For school trips, bus mode share is estimated at around 23% for Tasmanian urban areas overall (more detailed information is not readily available).
- For main shopping trips average bus mode share throughout Tasmania is 2.4%; while for all other trip purposes bus mode share is 4.5%. As noted, bus mode share for some groups is much higher than these averages.

Additional information (not in the table) on the breakdown of bus usage by demographic and economic characteristics indicates that:

- Bus usage is higher for females than males: females account for 54% of all bus usage.
- Bus usage is relatively high for lower income groups: 57% of bus users have incomes of less than \$16,000 pa, while only 25% of non-bus users are in this income category.
- Bus usage is heavily skewed towards non-employed groups (unemployed, home-makers, students and pensioners) and towards 'blue collar' employed groups.

Section C of the table estimates the proportion of the population in each centre that uses Metro services, by frequency of use. For the three centres overall approximately 10% of the population uses Metro services more than occasionally (ie at least once per week): the proportions in each centre are about 12% in Hobart, 10% in Launceston, 4% in Burnie. Among the adult population, the corresponding proportions are about 10% in Hobart, 8% in Launceston and 2% in Burnie. Around two-thirds of all adult bus trips are made by the 3% of the adult population that are frequent users (ie at least 6 trips per week). Around 16% of all children (under 16) are frequent users of Metro services. (It should be noted that these proportions will somewhat understate the proportion of the population that uses buses: there is some use of non-Metro services in the Metro catchment areas.)

F3. ATTITUDES, PERCEPTIONS AND PREFERENCES

F3.1 Reasons for Use/Non-Use of Bus Services

The following summarises the findings from several market research studies (by Metro, ABS) into reasons for the use or non-use of urban bus services in Tasmania generally and Metro's services in particular:

- A major reason given for bus use was the non-availability of a car. Other major reasons (in descending order) were 'convenience' (a rather vague term), lack of parking problems and cost advantages over car.
- Bus users ranked the 'best factors about using buses' to be (in descending order) convenience to home/work, service frequency/reliability, lack of parking problems, comfort, helpful drivers.
- Dominant reasons given for car usage instead of bus were 'greater convenience' and need to carry parcels etc. Other significant reasons were easy parking, bus timetables unsuitable, and need for car during the day.
- Car users considered that the dominant factor discouraging their use of buses was that they would be restricted to the timetables (part of the 'convenience' aspect). Other significant factors were that the bus takes too long, the bus stop location is inconvenient and the bus does not serve the desired destination.

F3.2 Suggested Bus Service Improvements

- Bus users dominant requirement for service improvements related to frequency – in general, at weekends and in evenings. Cheaper fares were suggested by only a small minority (4%) of respondents.
- Car users were asked what bus service improvements and other changes would encourage their use of bus. The most popular service improvements related to higher frequency and to-door service, followed by cheaper fares and faster service/more convenient routes. Other factors that would encourage bus use were the unavailability of a car, and if car use and parking became too expensive. It appears that 'stick' factors would be more successful than 'carrot' factors in encouraging bus use. However, the most common response was that nothing would encourage car users to switch to bus.

F3.3 Perceptions Of Metro Features : Importance And Performance

Metro surveyed its users' opinions about the importance of different bus service features and of Metro's performance against each feature. Most features covered were rated as 'important' or 'extremely important' by the majority of respondents. Important features for which Metro's performance was relatively poor included the suitability of services (times of operation), and the provision of information at bus stops.

Performance tracking surveys undertaken for Metro indicated that the poorest performance ratings related to bus cleanliness (interior and exterior) and limited display of passenger information, while 'driver service' was rated moderately.

TABLE F1 : MARKET SHARE ANALYSIS FOR METRO BUS TRAVEL					
Item	Hobart	Launceston	Burnie	Metro Total	Notes/Comments/Sources
A. All Travel: Metro first boardings/person % all trips by bus	31 3.1%	23 2.3%	9 09.%	26 2.6%	1998/99 Metro patronage records (excludes transfers) Based on above figures and assuming total of 1,000 trips pa per person.
B. Bus Mode share (by trip purpose):					From 1996 Census Journey-to-Work data. All bus mode shares fell significantly 1986-1991-1996.
B1. Work trips:					
CBD destinations	15.2%	5.3%	2.3%		
Non-CBD destinations	5.0%	2.3%	1.4%		
All destinations	7.3%	2.8%	1.9%		
B2 School trips				23%	Estimate of bus mode share to/from school from ABS 1997 Transport Survey, for all urban areas in Tasmania (Metro mode share is lower than this).
B3. Shopping trips				2.4%	Bus mode share for main shopping trips for all Tasmania (ABS 1997 Transport Survey). Bus share 6-7% for single adult households, close to zero for couple/children households.
B4. Other trips				4.5%	Bus mode share for 'other' trip purposes (ie excluding above purposes) for all Tasmania (ABS 1997 Transport Survey). Bus share higher than average for females (5.8%); young (18-24, 13.5%) and old (65+ 6.1%); unemployed (8.0%).
C. Proportion of Adult Population Using Buses:					Estimates based on 1995/96 first boardings and Metro 1996 Telephone survey. Total 8.4% of adult population represents 18,500 people. In addition, approx 10,300 students/children are regular bus users, giving a total of 28,800 people or 10.1% of the catchment populations.
Daily (10+ bus trips/week)	1.3%	0.4%	0.3%	0.9%	
Most days (6-10 bus trips/week)	2.3%	1.7%	0.5%	1.9%	
Some days (1-5 bus trips/week)	6.4%	5.9%	1.5%	5.6%	
Total	10.1%	7.9%	2.3%	8.4%	

APPENDIX G : SERVICE PLANNING AND MANAGEMENT SYSTEMS

G1. SERVICE PLANNING AND REVIEW PROCESS

Metro undertakes service reviews on an annual basis, with the key objective of maximising patronage within the constraints of the service contract with the Government.

These reviews draw on the following sources:

- external market research;
- trip and patronage data from the route costing system;
- customer and service performance surveys conducted by staff in the field;
- scrutiny of customer complaints and suggestions;
- scrutiny of driver complaints and suggestions;
- discussions with Local and State Government fora;
- discussions with business enterprises, educational institutions and assorted associations.

G2. MANAGEMENT SYSTEMS

Metro has in place several key ticketing and route information systems to assist in planning services including:

- **Metrofare:** a passenger ticketing and revenue/patronage data system;
- **Austrics:** a bus operator and bus scheduling/rostering system; and
- **Route Costing System:** a route and passenger data base system for planning and costing bus services.

APPENDIX H : PAST SERVICE INITIATIVES

H1 SERVICE QUALITY ASPECTS

Service quality has a number of different dimensions. Key matters considered by Metro include:

- the integration of Metro's services into the overall Tasmanian passenger transport system;
- passenger safety and security;
- the overall standard, and frequency of services provided;
- the quality of the vehicle fleet, depots and other facilities;
- the effectiveness of maintenance arrangements;
- the implementation of service innovations in operating areas;
- strategies for providing quality assurance, reliability and customer responsiveness; and
- strategies for the development of effective working relationships and liaison with Local Government agencies and customer groups in operating areas.

H2 SERVICE IMPROVEMENTS

Since 1996, Metro has implemented a range of service improvements including:

- Introduction of a Customer Service Charter (July 1997) which publicly outlines Metro's commitments to its passengers.
- introduction of community based services such as Doorstopper, Shopper Shuttle and Shopper Stopper services and Courtesy Zones which bring services closer to passenger' front doors;
- Introduction of services into Ulverstone and significant increase in service kilometres throughout the Burnie service area.
- Introduction of satellite yards (Hobart only) and increased number of part time drivers which kept the same driver or small group of drivers on specific trips, increasing rapport with passengers.
- Introduction of summer service to Clifton Beach capable of carrying surfboards.
- Customer relations training for all staff, and first aid training for all drivers.
- Increased number of timetables on bus stops.
- Introduction of website www.Metrotas.com.au containing timetables, school services, route maps and special event information.
- Annual information session with Year 6 primary students visiting Metro premises, involving explaining school bus operations, in particular safety, as many students will travel on a bus for the first time in Year 7.
- Hiring of more female drivers to better match service delivery with customer groups.
- Relocation of the Metro Shop in the Hobart GPO,
- Employment of security services at Elizabeth Street Bus Station, Rosny Park Bus Station, Glenorchy Bus Station and on vehicles Thursday, Friday and Saturday evenings in Hobart and Saturday evenings in Launceston.
- Introduction of on-board video cameras for all services operating at night in Hobart and one vehicle in Launceston.

- Provision of video surveillance at Elizabeth Street Bus Station.
- Refurbishment of a low floor bus to accommodate greater wheelchair numbers, so as to meet charter opportunities from nursing homes.

H3 COMMENTARY ON KEY SERVICE INITIATIVES

The following paragraphs provide further commentary on several of Metro's key service initiatives and their impacts:

- Doorstopper services
- Shopper services
- Courtesy Zone
- Burnie area service enhancements
- Summer holiday service.

H3.1 Doorstopper Services

Doorstopper services operate on regular timetables but have some flexibility as to the route followed, - passengers can ask either the driver or call a Free-Call telephone for a diversion to various pre-determined, and published, deviations.

Doorstopper services have been introduced during the interpeak period on weekdays to three areas in Hobart; New Town, Chigwell and Warrane.

Midibuses are generally allocated to these routes and a small number of specially selected drivers provide consistency of service. All of these routes serve a major regional shopping center and a Metro Bus Station.

The level of demand has not met expectations but the services are very well received by passengers who did not previously have access to a regular bus service. In each case a range of other services operates in these suburbs.

New Town

The service operates in the interpeak period and into the afternoon peak and requires two midibuses;

- total bus hours are approximately 15.6 per day,
- there are 25 trips per day, on 3 routes
- average daily patronage is approximately 85,
- daily in-service kilometres is approximately 215.

Chigwell

- The service operates in the interpeak period and requires two buses;
- total bus hours are approximately 10.25 per day,
- there are 16 trips per day, on 1 route
- average daily patronage is approximately 130,
- daily in-service kilometres is approximately 110.

Warrane

- The service operates in the interpeak period and requires one bus;
- total bus hours are approximately 5.3 per day,

- there are 8 trips per day, on 2 routes
- average daily patronage is approximately 55,
- daily in-service kilometres is approximately 55.

H3.2 Shopper Services

The **Shopper Shuttle** operates in West Moonah and provides services to Moonah, East Moonah, West Moonah (Springfield), and Glenorchy. Four (4) 18 seat Hino minibuses allow the route to include many areas which a larger vehicle could not service. Except for some peak services this is the only daytime service in West Moonah. East Moonah, Moonah and Glenorchy have other services.

The service operates in the interpeak period; total bus hours are approximately 29 per day, there are 60 trips per day, on 5 routes, average daily patronage is approximately 200, daily in-service kilometres is approximately 500.

The **Shopper Stopper** service in Launceston links the city center and most southern suburbs and services all major shopping/commercial centres in those suburbs. The service operates as two large loops with buses travelling in opposite directions. Two buses are used. Numerous other services operate on parts of this route.

The service operates in the interpeak period; total bus hours are approximately 9.25 per day, there are 8 trips per day, average daily patronage is approximately 60, daily in-service kilometres is approximately 230.

H3.3 Courtesy Zone

A **Courtesy Zone (set down where safe)** has been established in the suburb of Risdon Vale, the following extract from the service brochure explains the concept:

“Passengers can nominate to the bus driver where they would like to get off the bus. The driver will stop the bus as close as possible to the requested spot, depending on safety of passengers, the bus and other road users, and on sufficient time being given between the request and desired set down point.”

No analysis of the impact has been undertaken. No significant increase in patronage was anticipated, the major benefit was expected to be increased convenience to existing passengers. No additional resources were required, since the new service is added to the previously timetabled trips. The Courtesy Zone allows for flexibility in alighting point, not boarding. Other areas are being considered for additional Courtesy Zones.

H3.4 Burnie Area Service Enhancements

A major revision of all Metro services in **Burnie, Wynyard and Ulverstone** was introduced in January 1999, some amendments were introduced in November 1999. The main features of the new services, developed by a team including Burnie staff, which commenced on 18 Jan 1999, are:

- The route structure was altered to provide return services. These provide a more effective local service as they allow two-way travel and the timetable/route structure provides for more direct and quicker access to major attractors.
- Upper Burnie, which is the local shopping centre for most residential areas of Burnie, became a second focus of services.
- As far as practicable, departures were regularly spaced and the timetable format has the ‘look and feel’ of Hobart timetables showing arrival and intermediate times. The Shorewell timetable is less regular to fit in with class times at Hellyer College.

- Several new areas were serviced (East and West Ulverstone, East and West Wynyard, Carmantown in Penguin and Downlands in Burnie) and parts of Acton, Hillcrest and Romaine.
- Two midi-buses operate the Acton, Montello and Havenview routes.
- The hours of operation were largely unchanged from the previous services.

Metro promoted the services by letterbox drop of timetables, which were produced in a booklet form for the first time in Burnie.

Minor alterations were made to school services, these involve the combination of services, either school/school or school/route service trips, details of these alterations were fully discussed with school principals prior to their implementation.

The new services increased the service frequencies to most areas and involved a 40% increase in service kilometres, using the same number of buses and employees as the prior service.

Burnie New Services Review November 1999

From 22 November changes were implemented to the new services in:

- Wynyard to remedy timekeeping problems and to provide some services to the Spencer Nursing Home
- Somerset, additional trips via Malakoff St in upper Somerset,
- Ulverstone, the route and timetable was altered in response to passenger requests. This involved alterations within Ulverstone and the service to Sulphur Creek and Preservation Bay was reinstated.

The previous service included 48 loop trips and 51 one-way trips, the new service provides 151 one-way trips. Although the bus hours increased there was very minor change to the drivers paid hours.

H3.5 Summer Holiday Service

A summer holiday service operated every day from 4 Jan 2000 to 5 Feb 2000 from Hobart Bus Station to **Clifton Beach**, a popular venue for young people. One return trip was provided per day, each trip was of 50 minutes duration. A bus was modified to allow for the carriage of surfboards. Average daily patronage was approximately 18.

APPENDIX J : OPERATIONAL AND COST EFFICIENCY

J1 OVERVIEW

This appendix provides an assessment of Metro's operational and cost-efficiency performance, both over time and relative to other Australian public and private sector bus operators, by drawing on a range of partial productivity indicators. In doing so, the following should be noted:

- The analysis principally draws on the results of the 1998/99 Australian Bus Benchmarking Assessment, conducted by Booz·Allen & Hamilton. This assessment covered the three separate Metro operations, four interstate public sector bus operators and six urban private operators. In the following summary of findings, reference is only made to averages and ranges for the public and private sector samples, so as to protect the confidentiality of individual bus operators.
- The results given here are provisional and may be subject to change (although any changes are likely to be minimal).
- The limitations associated with partial productivity measures should be noted, specifically the impact that alternative mixes of labour and capital inputs can exert on such measures.

J2 METRO COMPARATIVE PERFORMANCE

Table J1 sets out various productivity statistics and unit costs for 1998/99 for:

- Metro (three centre totals, excluding Hobart Coaches operation).
- The sample of four public bus operators in state capital cities (Brisbane Transport, ACTION Canberra, Darwin Bus Service, State Transit Newcastle Buses) - giving lowest, average and highest figures for the sample (provisional figures).
- The sample of six private bus operators of urban route services in NSW, Victoria, SA and WA --giving lowest, average and highest figures for the sample (provisional figures).

The main findings from this table on the relative performance of Metro are as follows:

Staff Statistics

- Metro's staff level (per bus hour) is slightly above the average for the public operators (by about 2%) and higher than all private operator figures (need to reduce 32% to match the private average).
- Metro's average staffing cost (\$40,300 per staff member) is the lowest of the public operators, and significantly below the average for the private operators.

Bus Statistics

- Metro's bus utilisation (bus hours/peak bus and bus kilometres/peak bus) is well below the averages for both the public and private operators. This in part reflects relatively low levels of evening and weekend services.
- Metro has a high spare bus ratio relative to both the public and private operator averages: a more reasonable ratio would be in the 7-10% range.
- Metro's average bus age is on the low side of both the public and private operator samples. (At the time of the 1996/97 Review, Metro had the lowest average age of all operators surveyed, but no new buses have been purchased since that time.)

Unit Costs

- Metro's driver costs/per bus hour (some 42% of total costs) are the lowest of the public operators but considerably higher than those of any of the private operators (need to reduce 23% to match the private operator average).
- Metro's bus running costs per bus kilometres (11% of total costs) are slightly higher than the averages for both the public and the private operators.
- Metro's bus repairs/maintenance costs per bus kilometre (9% of total costs) are the lowest of all the public operators, but well above all but one of the private operators (and need to reduce by 29% to match the private operator average).
- Metro's overhead costs per peak bus (24% of total costs) are the lowest of all the public operators by a substantial margin, but somewhat (about 12%) above the private operator average.
- Metro's bus capital charges per peak bus (14% of total costs) are lower than three of the four other public operators, but higher than four out of the six private operators. These results largely reflect the age of the Metro fleet.

'Standardised Costs'

To allow for cost comparisons between operators, each operator's unit costs have been applied to a 'standardised operation' (involving one peak bus, 2,500 bus kilometres and 60,000 bus kilometres per year). The corresponding average costs per kilometre were calculated, with the following results:

- **Excluding** bus capital charges, Metro's costs are the lowest of all the public operators by a significant margin: they are 21% below the average for the other public operators. However, Metro's overall costs are above all the private operators: they would need to reduce by 19% to achieve the private operator average.
- **Including** bus capital charges, the picture is generally similar: Metro's costs are 20% below the public operator average, but would need to reduce by 17% to achieve the private operator average.

J3 UNIT COST TRENDS OVER TIME

The Australian Bus Benchmarking Assessment now provides unit cost statistics for Metro on a consistent basis for most years since 1992/93, ie 1992/93, 1993/94, 1994/95, 1995/96 and 1998/99. These indicate unit cost trends over the period 1992/93 – 1998/99 in real terms (ie deflated by the CPI) as summarised in Table J2.

Key features of these trends include:

- **Drivers:** significant reduction in unit costs over last few years (13% since 1995/96).
- **Bus repairs/maintenance:** continuing decline in unit costs, now approaching 40% reduction since 1992/93.
- **Overheads:** some increase in last few years, following substantial decline earlier.
- **Bus capital charges:** increased up to 1994/95, as new buses were purchased; since declined rapidly (by almost 50%) as no further buses have been purchased and the fleet has depreciated with age.

Excluding the bus capital charges, Metro's standardised costs have reduced by almost 10% since 1995/96 and by 15% overall since 1992/93.

Over the period since 1992/93, private operator costs generally have not changed substantially in real terms. Hence the cost reductions by Metro (and some other private operators) indicate some 'closing of the gap' between the two sectors: however, a substantial 'gap' still remains, as indicated above.

J4 SUMMARY

The key findings from the appendix relating to Metro's operational and cost efficiency may be summarised as follows:

- Metro's 1998/99 unit cost performance is better than that of the interstate public operators assessed, by a significant margin.
- Since 1992/93 (the first year for which data are available), Metro has made significant progress in reducing its unit costs, with an overall reduction (excluding bus capital charges) of about 15%. The main cost reductions have been in the areas of drivers and bus repairs/maintenance. Bus capital charges have also been reduced substantially.
- A substantial unit cost gap still remains between Metro and the better performed private operators. Metro's overall unit costs (excluding bus capital) need to reduce by 19% to achieve the average for the private operator sample surveyed. The major components of the remaining cost gap are (in descending order of size) drivers, bus repairs/maintenance, and overheads.

TABLE J1 : METRO PERFORMANCE COMPARISONS, 1998/99 (1)							
Item	Metro	Other Public Operators			Private Operators		
		Low	Ave (2)	High	Low	Ave (2)	High
Staff Statistics							
Staff/Million Bus Hours	939	816	920	1,019	561	637	769
Average Labour Costs/Staff (\$000)	40.3	49.2	53.2	59.2	36.8	44.6	53.6
Bus Statistics							
Bus Hours/Peak Bus	2,200	2,250	2,540	3,025	2,050	2,720	3,390
Bus Kilometres/Peak Bus	56,500	61,700	66,400	69,600	57,600	64,100	74,600
Spare Buses/Peak Bus (%)	13.5	9.6	12.8	20.0	5.8	8.0	10.0
Average fleet Age (years)	8.3?	7.7	9.6	13.4	6.5	9.3	15.7
Unit Costs							
Drivers – per bus hour (\$)	28.49	29.65	34.87	39.67	19.18	21.98	25.90
Bus Running – per bus km (c) ⁽³⁾	29.5	25.0	28.1	32.2	25.3	27.8	29.4
Bus Repairs & Maintenance - per bus km(c) ⁽⁴⁾	24.9	25.9	33.3	37.8	12.2	17.6	29.8
Overheads ⁽⁵⁾ – per peak bus (\$000)	33.9	46.0	50.6	52.7	21.4	29.8	38.4
Bus Capital Charges ⁽⁶⁾ – per peak bus (\$000)	21.4	12.5	24.3	37.0	8.5	19.5	36.1
Average Costs for 'Standardised' Operation⁽⁷⁾							
Cost/Bus Kms (excl bus capital)	2.30	2.65	2.91	3.12	1.58	1.87	2.00
Cost/Bus Kms (incl bus capital)	2.65	3.02	3.32	3.74	1.72	2.19	2.52

- Notes:** (1) Provisional results only (may be subject to revision)
(2) Unweighted average of 4 public and 6 private operators
(3) Covers fuel, oil, tyres.
(4) Bus repairs and maintenance, including bus (comprehensive) insurance.
(5) Covers all costs not included elsewhere, including capital charges on assets other than buses.
(6) Calculated at 22% of market values of the buses.
(7) For operation with 2,500 bus hours pa/peak bus and 60,000 bus kms pa/peak bus.

TABLE J2 : METRO UNIT COST TRENDS, 1992/93 – 1998/99			
Cost Category	Change in Unit Costs (Real Terms)		Comments
	1992/93 – 1998/99	1995/96 – 1998/99	
Drivers	-11.3%	-12.8%	Most of reduction since 1995/96
Bus Running	-1.4%	-7.6%	Largely dependent on price of fuel.
Bus Repairs & Maintenance	-38.2%	-21.3%	Continuous significant decline since 1993/94.
Overheads	-12.5%	+5.2%	Declined in period up to 1995/96, some increase since then due to an 11% decline in peak buses and additional charges incurred as a result of corporatisation in 1998.
Standardised Costs (excluding Bus Capital Charges)	-14.5%	-9.5%	Continuing steady decline throughout period (except 1994/95)
Bus Capital Charges	-27.9%	-34.0%	Reached peak in 1994/95 (with purchase of new buses), but declined rapidly since (with ageing of fleet).

APPENDIX K : REFERENCES

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